

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



STUDY PROGRAMME ACCREDITATION MATERIAL:

POWER, ELECTRONIC AND TELECOMMUNICATION ENGINEERING

UNDERGRADUATE ACADEMIC STUDIES

Novi Sad

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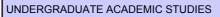


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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



Programme name	Power, Electronic and Telecommunication Engineering
Independent higher education institution where the programme is being executed	University of Novi Sad
Higher education institution where the programme is being executed	Faculty of Technical Sciences
Educational-scientific/educational-art field	Technical-Technological Science
Scientific, proffesional or art field	Electrical and Computer Engineering
Type of studies	Undergraduate Academic Studies
Study scope, expressed in ECTS	240-245
Academic degree, abbreviation	Bachelor with Honours in Electrical and Computer Engineering, B.Elec.Comp.Eng.
Study length	4
Programme implementation starting year	2005
Future course implementation starting year (for new programme)	
Number of students attending this programme	641
Planned number of students to be enrolled in this programme	720
Programme approval date (state the approval issuer)	14.11.2012 - Science Education Council 29.11.2012 - University of Novi Sad Senate
Programme language	Serbian, English
Programme accreditation year	2008
Web address containing programme information	http://www.ftn.uns.ac.rs



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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 00. Introduction

The study programme Power, Electronic and Telecommunications Engineering has been created on the basis of modern scientific knowledge in the field of Electrical and Computer Engineering, modeled after similar study programmes at the leading universities in the world and in accordance with the Bologna recommendations and technology strategy development of AP Vojvodina and Serbia.

Lectures within the undergraduate academic studies last 4 years and a graduate thesis is planned for the eighth semester.

Each year the study programme usually enrolls 200 students. Students who successfully complete this study programme obtain a diploma in Electrical and Computer Engineering with the title of the study programme Power, Electronic and Telecommunications Engineering, as well as information on particular competences that the students obtain during their studies.

The study programme enables students to acquire necessary knowledge, skills and practical experience in the field of power systems, power electronics, electric machines, electronics, communication technologies, signal processing, as well as measurement systems. Acquired knowledge and skills enable graduate students to successfully answer the demands of the market and knowledge-based economy in the field of modern electrical and computer engineering.

Lectures in professionally applied and scientific-professional subjects are carried out by teachers from the Department of the Power, Electronics and Telecommunications Engineering at the Faculty of Technical Sciences in Novi Sad, which is prime and responsible for the study programme. Lectures in theoretical-methodological and academic-general educational subjects are carried out by teachers from other departments of the Faculty of Technical Sciences. The practical part of the lectures is carried out in modern and well equipped laboratories in which students are trained to solve practical engineering problems.



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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Standard 01. Programme Structure

The outcomes of the learning process include knowledge, skills and competences which enable students to apply acquired knowledge to the problems arising in engineering practice, to use expert literature and to enable students to continue their studies, if they choose so.

Within the study programme Power, Electronic and Telecommunication Engineering there are five modules: (a) Power Engineering – Power Engineering Systems, (b) Power Engineering – Power Electronics and Electric Machines, (c) Microcomputer Electronics, (d) Communication Technologies and Signal Processing, (e) Measurement Systems. The first year of studies is common, after which students opt for one of the modules.

For the first two modules, Power Engineering – Power Engineering Systems and Power Engineering – Power Electronics and Electric Machines, the first three years are common. Within the module Microcomputer Electronics, through elective courses, students acquire competences from the following areas: Embedded Systems and Algorithms, Microelectronics and Applied Electronics. Within the module Communication Technologies and Signal Processing, through elective courses, students acquire competences from the following areas: Signal Processing, Communication Systems and Software. Students have obligatory and elective courses within the elected module. Elective courses are chosen from a list of suggested courses. An elective course can be replaced with one of the courses taught at the Faculty of Technical Sciences or the University of Novi Sad with the consent of the head of the study programme.

Courses are carried out in the form of lectures and practice. At lectures, while using the appropriate modern didactic-methodological methods, students become familiar with the course subject matter and are offered explanations that help them understand it more easily. At practice classes, complementing the lectures, students solve specific engineering problems and are given examples which further illustrate the course matter. The practice classes can be auditory, computer or laboratory practice. Consultations also present an important segment of knowledge transfer.

Number of the students per group depends on the character of practice. Student obligations may comprise of research papers, homework assignments, as well as smaller professional project assignments. Every activity of the student during the teaching process is evaluated and graded in accordance with the rules established at the Faculty level. The number of obtained credits is represented by the unique methodology and it reflects student load.



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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 02. Programme Objectives

The goal of the study programme is to educate students for the profession of an engineer of electrical and computer engineering-Bachelor in accordance with the economy needs, knowledge based economy and society at large.

The study programme Power, Electronic and Telecommunication Engineering is designed to provide acquisition of competencies necessary for the graduated engineer of electrical and computer engineering. An important role of all teachers in this study programme is to educate top engineers ready for active involvement in the regional development and responsible for the maintenance of the high-tech and research potential of Vojvodina and Serbia in the field of electrical and computer engineering.

The objective of the study programme is fully in accordance with the main objectives and goals of the Faculty of Technical Sciences and is in line with the high educational standards proposed by our educational system. Also, the realization of this study programme educates engineers of electrical and computer engineering who possess knowledge necessary for the labour market in Serbia, the region and beyond.



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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 03. Programme Goals

The objective of the study programme is to produce qualified engineers-bachelors who are highly competent for the development and design of complex systems and their parts and who possess the fundamental knowledge necessary for further master and doctoral studies and are able to keep step with the fast technological development in the field of power engineering, electrical machines, electronics, communication systems and software, signal processing, as well as measurement systems.

The study programme enables students to analyze problems and develop ability of critical thinking, the development of team work skills and the acquisition of specific practical skills necessary for successful professionals, as well as the ability to present (in oral and written form) their results to professional and wider public.

One of the specific objectives of the study programme is the development of students' awareness of the necessity for permanent education and advancement in the field of electrical and computer engineering.



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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Standard 04. Graduates` Competencies

After completing the study programme, students will be competent for the development, engineering, design and application of modern complex systems and their parts in the field of electrical and computer engineering (power engineering, power electronics, electric machines, electronics, measurement systems, telecommunications, signal processing, microelectronics).

Students who successfully complete the study programme in the field of power, electric machines, electronics, telecommunications and electrical measurements will be able to:

- -understand and apply fundamental knowledge in electrical engineering.
- -apply knowledge in mathematics, physics and engineering disciplines.
- -design systems, components and processes based on the provided specifications.
- -use engineering approach and modern software tools in engineering practice.
- -design and carry out engineering experiments and afterwards analyze and interpret obtained data.
- -understand, notice, formulate and solve engineering problems.
- -advance their knowledge and follow technological development.
- -work in a team composed of experts in different fields.
- -understand professional and ethical responsibility of electrical and computer engineers.
- -communicate efficiently.
- -understand impact of engineering solutions on society and environment.
- -accept the need and actively participate in life long education.



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Power, Electronic and Telecommunication Engineering



Standard 05. Curriculum

The curriculum of the undergraduate academic studies Power, Electronic and Telecommunication Engineering is designed to satisfy objectives of the study programme. In the structure of the study programme there are academic-general education, theoretic-methodological, scientific-professional and professional-applicative courses. In order to meet individual preferences of students, study programme curriculum contains elective courses as well, through which student obtain particular competences within the elected modules.

All courses last one semester and are worth certain number of ECTS credits, where one credit corresponds to approximately 30 hours of student activity. The order of course lectures in the study programme is such that the knowledge required for the following courses is gained through previously attended courses. In order to successfully complete this study programme, students must collect at least 240 ECTS credits. Curriculum includes description of each course which contains the name of the course, the type of the course, the year and semester of the studies, the number of ECTS credits, the name of the lecturer, the course objective with the expected outcome, the knowledge and competences the student will acquire, the prerequisites for taking the course, the course content, the recommended literature, the methods of lecturing, the knowledge tests and evaluation and other relevant data.

Professional practice lasting 45 hours is an integral part of this curriculum and it is realized in adequate scientific-research institutions, innovative organizations, companies, public institutions, etc.

Students complete their studies by writing the graduate thesis which consists of theoretical-methodological preparations necessary for complete understanding of the field, writing and defense of the graduate thesis.

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:			Б.									
Course id:	Discrete Mathematics											
Number of ECTS:	9											
Teachers:		Doroslov	ački D. Rade, Adžić Z. Neven	ka, Sladoje Matić I. Nataša, Teofanov Đ. L	jiljana							
Course status:		Mandato	ry									
Number of active tea	ching classe	es (weekly	')									
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:							
3	4	4	0	0	1							
Precondition courses	3		None									

1. Educational goal:

Enabling students to think abstractly and gain new knowledge in the field of elementary, general, abstract and linear algebra, as well as in the fundamentals of classic combinatorics.

2. Educational outcomes (acquired knowledge):

Acquired knowledge is used in further education and professional courses. Mathematical models are designed and solved in professional courses using the material from this course.

3. Course content/structure:

Lectures (Theoretical lectures). Logic, relations, functions, Boolean algebra, groups, rings, fields, polynomials, complex numbers, finite fields, free vectors, analytical geometry in space (vector!), determinants, systems of linear equations, vector space, matrices, characteristic roots and vectors. Practice lectures (lab): In laboratory exercises adequate examples and tests from the theoretical lectures are done in order to exercise lectured theory where exercises contribute to understanding of the theory.

4. Teaching methods:

Lectures; Computing practice. Consultations. Lectures are dynamic and interactive. In lectures theoretical part of the course is presented accompanied by characteristic and representative examples in order to better understand the matter. In practice, which follows lectures, typical problems are solved and lectured theory is deepened. Besides lectures and practice, regular consultations and group consultations are also held. Part of the course, which is a logical unit, can be passed within the teaching process in the following 2 modules (the first module: relations, functions, Boolean algebra, groups, rings, fields, polynomials, complex numbers, finite fields, free vectors, analytical geometry in space (vector!); the second module: determinants, system of linear equations, vector space, matrices, characteristic roots and vectors. Theoretical part is passed through the test (elimination and basic), Practical part is passed through solving five serious problems.

Knowledge evaluation (maximum 100 points)							
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points		
Computer exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	20.00		
Lecture attendance	Yes	5.00	Theoretical part of the exam	Yes	40.00		
Test	Yes	15.00					
Test	Yes	15.00					

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	Literature								
Ord.	Author		Title		Publisher	Year			
1,	Doroslovački R	Principi algebre:	opšte, linear	ne i diskretne	FTN Novi Sad	2012			
2,	2, Doroslovački R., Nedović Lj. Testo		ne matemati	ke i linearne algebre	FTN, Novi Sad	2011			
3,	3, Doroslovački R., Nedović Lj. Zbirka		ka ispitnih zadataka iz diskretne matematike FTN, Novi Sad		FTN, Novi Sad	2006			
4	Rade Doroslovački	Principi algebre	onšte diskre	tne i linearne	ALFA GRE NOVESAD	2008			

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Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:										
Course id:	E105		Fundamentals of Electrical Engineering 1							
Number of ECTS:	9									
Teachers:		Bajović N	Bajović M. Vera, Đurić M. Nikola, Pekarić-Nađ M. Neda							
Course status:		Mandatory								
Number of active tead	hing classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
4	4	4 0 0 0								
Precondition courses			None							

1. Educational goal:

The course objective is to introduce students to the terminology of electrical engineering, the basic physical laws of electrostatics and to enable students to analyze electric circuits of time-invariant currents. Also, the objective is to teach the students to calculate basic parameters of the elements in such circuits, resistors and capacitors.

2. Educational outcomes (acquired knowledge):

The students who successfully complete the course are able: -to calculate the capacitance of a simple homogeneous symmetrical structure (e.g. coaxial cable with several layers of dielectrics) -to calculate the resistance of homogeneous multilayer structure - to analyze simple electric circuit of time-invariant current - to calculate maximum power of elements in the circuits and protect them from burning out.

3. Course content/structure:

Electrostatics (Electric field strength vector, Gauss's law, Electric potential and voltage, Conductors in electrostatic field, Capacitance and capacitors, Dielectrics in electrostatic field, Boundary conditions, Energy and forces in electrostatic field). Electric circuits of time-invariant currents (Current density vector and current intensity, Ohm's law and resistors, Joule's law, Kirchhoff's Laws, Generators, Conditions of maximum power transmission, Power conservation theorem, Methods of circuit analysis, Superposition Theorem, Thevenin's and Norton's theorem, Compensation theorem, Reciprocity theorem, Electrical circuits with capacitors).

4. Teaching methods:

The teaching process consists of lectures and tutorials, with occasional video presentations. The inductive method is applied in the lectures. The students' knowledge grows gradually, trough many simple problems solving.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Test	Yes	10.00	Written part of the exam - tasks and theory	Yes	70.00			
Test	Yes	10.00						
Test	Yes	10.00						

Ord. Author Title Publish	er -	V
(J.	Year
1, Branko D. Popović Osnovi Elektrotehnike 1 Građevinska knjiga	Beograd	1998
2, N. Pekarić, V. Bajović Zbirka rešenih ispitnih zadataka Građevinska knjiga	Beograd	2007

ASTRAS STUDIO

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Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E104]	Mechanics							
Number of ECTS:	5									
Teacher:		Simić S.	Simić S. Srboljub							
Course status:		Mandatory								
Number of active tead	ching classe	es (weekly)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	2	2	0 0 0							
Precondition courses			None							

1. Educational goal:

Getting introduced to basic concepts and principles of mechanics as a part of physics and as a fundamental engineering discipline. Mastering basic methods of the analysis and solution of engineering problems.

2. Educational outcomes (acquired knowledge):

Acquired knowledge students use as a conceptual basis in other engineering disciplines.

3. Course content/structure:

Units of measurement, physical measurement, and vectors. Rectilinear motion of a particle. Curvilinear motion of a particle. Newton's law of motion. Application of Newton's laws. Work and kinetic energy. Potential energy and conservation of energy. Momentum, impulse and collision. Rotational motion of rigid bodies. Rotational dynamics. Equilibrium and elasticity. Gravitation. Oscillatory movement. Computer simulation of dynamic systems.

4. Teaching methods:

Lectures comprise theoretical background of certain topic, as well as illustrative examples. Exercise classes are consisted of the application of theoretical knowledge and development of the methods of analysis to selected problems. Wherever it is possible, the problems of mechanics are illustrated by computer simulations, or supported by video clips of real processes.

Knowledge evaluation (maximum 100 points)

	Pre-examination obligations		Mandatory	Points	Final ex	Final exam Mand		
Exercise	Exercise attendance Yes 5.00 Coloquium exam					Yes	20.00	
Homewo	ork		Yes	20.00	Coloquium exam		Yes	20.00
Lecture a	attendance		Yes	5.00	Oral part of the exam		Yes	30.00
	Literature							
Ord.	Author			Title	;	Publisher		Year
1,	Đorđe Đukić, Teodor Atanacković, Livija Cvetićanin	Mehan	iika			Univerzitet u Novom Fakultet tehničkih na		2005
	S.M. Targ		Teorijska mehanika - kratak kurs			Građevinska knjiga, Beograd		1983
3,	V.M. Vučić, D.M. Ivanović	Fizika	Fizika I			Naučna knjiga, Beo	grad	1988
4,	H.D. Young, R.A. Freedman	Univer	sity Physics			Addison-Wesley		2008

TAS STUDIOS

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:				0.6						
Course id:	E109		Software Lab							
Number of ECTS:	1									
Teachers:										
Course status:		Mandato	γ							
Number of active teac	hing classe	es (weekly)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
0	()	2	0	0					
Precondition courses			None							

1. Educational goal:

Acquisition of new knowledge in the use of personal computers. Equalization of the level of student knowledge and enabling students to further follow lectures, computer labs, write reports, seminar papers and bachelor thesis.

2. Educational outcomes (acquired knowledge):

Independent use of personal computers and working on following programs: Windows Explorer, Control Panel, DOS, Internet Explorer, Outlook Express, Word, Excel, Power Point. Acquired knowledge will be used in engineering practice as well as in further education.

3. Course content/structure:

Windows Explorer: folder tree structure, Desktop, My Computer, My Network Places, View, search, working with folders, files, archiving, send to, Control Panel, DOS, Internet Explorer, Outlook Express, Web mail Word: View/Toolbars, Tools/Options, Save (Autorecover info), page setup, moving through the documnet, text selection, editing, fonts, paragraph, symbols, view, print, undo, redo, history, find, replace, bullets and numbering, columns, tabs, Insert, header, footer, drawing, tables, writing equations, English spelling and grammar, Thesaurus, Word Count, Track Changes, working with multiple documents. Excel: spreadsheet, formatting, Page Setup, filling, hiding cells, border, color, cell merge, naming cells, format cells, formulas, basic functions, graphs, data sorting, validation, drop-menu in the cell, Windows/split. Power Point: slide layout, fonts, lining, Slide master, deleting text and whole fields, Insert Picture / Clip Art, From File, Table, formatting slide (Background, Slide design), Slide Show / Custom Animation, Slide Transition, Slide Sorter View, Slide Show, Hide slide, View / Notes page.

4. Teaching methods:

Lectures and computer lab.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory P			Points	Final ex	al exam Mandatory F			
Comput	Computer exercise attendance Yes 5.00			5.00	Practical part of the exan	n - tasks	Yes	70.00
Homew	rork		Yes	5.00				
Homew	ork		Yes	5.00				
Homew	ork		Yes	5.00				
Test			Yes	10.00	0			
				Liter	ature			
Ord.	Author	Title			9	Publisher		Year
1,	V. Crnojević-Bengin	Skripta	Skripta FTN, Novi Sad			2005		
		-					•	



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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:		Consider word To sharing								
Course id:	E106		Sociology of Technique							
Number of ECTS:	2									
Teacher:		Radivoje	ładivojević D. Radoš							
Course status:		Mandato	Mandatory							
Number of active tea	ching classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	(0	0 0 0							
Precondition courses			None							

1. Educational goal:

Enabling engineers to understand social importance and role of technical sciences in the society development, positive and negative implications of technical sciences to the development of society and men, as well as self social importance and responsibility in the creation of human society.

2. Educational outcomes (acquired knowledge):

Acquisition of social knowledge about features, sources, social functions and creators of technical knowledge; knowledge about the impact of the nature of social systems on technical development and the impact of technique on the society development; knowledge about impact of technique on globalization process, nature destruction and creation of risky society; knowledge about impact of technique on changes of the work contents and work organization forms; knowledge about the impact of the mass media on people's lives, education, culture and democracy.

3. Course content/structure:

Technical knowledge: features and social functions of technique, sources of technical knowledge, creators of technical knowledge, dissemination of technical knowledge, scientific-technical potential, science and technique relationship. Relationship between technique and society: the impact of society on technical development and the impact of technical sciences on the development of society-industrial and information society. The impact of technical sciences on life, awareness and culture. Technical sciences and globalization: causes and dimensions of globalization, technological gap, brain drain; Technical sciences and work organization: flexible production, network organizations, knowledge economy, electronic economy. Technical sciences and work: reduction of working hours, change of work content, decline of the work importance. Technical sciences and alienation at work: the impact of television on society, media theories, mobile telephony and internet, the impact of internet on society, media imperialism, mass culture, cyber criminal. Technical sciences and education: education and new communication technologies, education and technological gap, virtual media and virtual reality, resistance and alternatives to global media. Technical sciences and ecological crisis: global warming, genetically modified food, technical risks, technical society as risky technical intelligence: social status and impact, engineering ethics.

4. Teaching methods:

The problem is presented in lectures, and then a discussion is opened in which students may ask questions, give objections and contribute to the presented matter.

Knowledge evaluation (maximum 100 points)

	Pre-examination obligations		Mandatory	Points	Final ex	nal exam Mandatory		
Lecture	attendance		Yes	5.00	Oral part of the exam	am Yes		
Test			Yes	45.00				
	Literature							
Ord.	Author			Title	•	Publishe	er	Year
1,	Radoš Radivojević	Tehnik	a i društvo			Fakultet tehničkih nauka, Novi Sad		2004
2,	Entoni Gidens	Sociol	ogija			Ekonomski fakultet, Beograd		2003
3,	D. Mackenzie, J. Wajeman	The S	ocial Shaping	of Techn	ology	Open Univer. Pres.		1985
4,	Majkl, Haralambos	Sociol	ogija			Školska knjiga, Zag	reb	2004
5,	Radoš Radivojević	Sociol	ogija nauke			Stylos, Novi Sad		1995
6,	Chris Barker	Telev	ision, Globaliz	zation and	d Cultural Identities	Open University Press		1999
7,	Eugene Loos, Enid Mante- Meijer, Leslie Haddon		ocial Dynamic unication Tec		mation and	Ashgate		2008
8,	Wenda K. Bauchspies, Jennifer Croissant, Sal Restivo		Science, Technology and Society: A Sociological Approach			John Wiley & Sons		2005
9,	Jan L. Harrington	Techn	ology and So	ciety		Jones & Bartlet		2011
10,	Deborah G. Johnson, Jameson M. Wetmore	Techn Future		ciety: Bui	lding our Sociotechnical	MIT Press		2009

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Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:									
Course id:	EJ01Z		English Language - Elementary						
Number of ECTS:	2								
Teachers:			Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafranj F. Jelisaveta						
Course status:		Mandato	ry						
Number of active tea	ching classe	es (weekly)						
Lectures:	Practical	cal classes: Other teaching types: Study research work: Other							
2		0	0 0 0						
Precondition courses			None						

1. Educational goal:

Mastering the basics of the English language: pronunciation of English sounds, acquisition of vocabulary related to everyday situations, mastering the basics of English morphology and syntax.

2. Educational outcomes (acquired knowledge):

Students are able to use spoken and written English in simple, everyday situations.

3. Course content/structure:

The use of articles, nouns (nouns in Plural), adjectives (types of adjectives, possessive adjectives, comparison of adjectives), pronouns (personal pronouns), auxiliary verbs (be, do, have), modal verbs. The use and construction of tenses (Present Simple, Present Continuous, Present Perfect, Past Simple, future forms). Question and negative form of the sentence. Vocabulary related to everyday topics: introduction, family, free time, work, food and beverages, naming and description of everyday objects, description of people and places etc.

4. Teaching methods:

Communicative method is used, since the objectives and contents of the course are aimed at communication which is very complex. The emphasis is placed on communication between students and teachers and students among themselves, as well as balanced development of all language skills.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points			
Test			Yes	10.00	Written part of the exam - tasks and theory Yes 70.0			70.00			
Test		Yes	10.00								
Test		Yes									
				Liter	ature						
Ord.	Author			Title	;	Publishe	r	Year			
1,	John and Liz Soars	New H	leadway Elen	nentary		Oxford University P	ress	2002			
2,	2, Grupa autora Oxford English - Serbian Dictionary Oxford University P						ress	2006			
3,	N. Coe, M. Harrison, K. Peterson	l Practice Gra	asic	Oxford University P	ress	2006					

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Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:									
Course id:	urse id: E102A Mathematical Analysis 1								
Number of ECTS:	9								
Teachers: Kovačević M. Ilija, Mihailović P. Biljana									
Course status:		Mandato	Mandatory						
Number of active tea	ching classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	4	4	0 0 1						
Precondition courses			None						

1. Educational goal:

Enabling students to think abstract and gain basic knowledge in the field of Mathematical analysis (limiting processes, differential and integral calculus, ordinary differential equations).

2. Educational outcomes (acquired knowledge):

Acquired knowledge is used in further education and student designs and solves mathematical models in professional courses using the knowledge from Mathematical Analysis 1.

3. Course content/structure:

Theoretical lectures: Field of real and complex numbers. Metric space. Series (convergence of series, real and complex sequences, complete metric space). Limits, continuity and uniform continuity of functions. Real functions of a real variable (limit, continuity, uniform continuity, differential calculus and application, indefinite integral; definite integral and application; improper integral). Real functions of several real variables (limits, continuity, uniform continuity, differential calculus and application). Ordinary differential equations of first and higher order. Linear differential equations of n-th order. Practice (Exercises): Corresponding examples from theoretical lectures are done in exercises, thus practicing the taught lectures and understanding them better.

4. Teaching methods:

Lectures; Numeric computing practice. Consultations. Lectures are combined. Theoretical part of the lectures is accompanied by typical examples in order to better understand the matter taught in lectures. In practice, which accompanies lectures, typical problems are solved and the knowledge from the lectures is deepened. Besides lectures and practice, consultations are held on a regular basis. Part of the lectures, which presents one logical whole, can be passed during the teaching process in the form of the following 5 modules (the first module: limiting processes; the second module: differential calculus of real functions of a real variable, the third module: differential calculus of real functions of several variables; the fourth module: integral calculus: the fifth module: ordinary differential equations).

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandatory Points Final exam Mandatory										
Exercise attendance	Yes	3.00	Final exam - part one	No	50.00					
Lecture attendance	Yes	2.00	Final exam - part two	No	50.00					
Test	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00					
Test	Yes	10.00								
Test	Yes	10.00								

Literature Ord. Title Publisher Year Ilija Kovačević, Nebojša Matematička analiza 1 - uvodni pojmovi i granični FTN (Edicija tehničke nauke-Ralević.V.Marić.B.Carić. 2012 1 udžbenici), Novi Sad S.Medić, M.Novković I. Kovačević, V. Marić, M. FTN (Ediciia tehničke nauke-Matemarička analiza 1 - integralni i diferncijalni račun, Novković, B. Carić, N. Ralević, S 2012 obične diferencijalne jednačine udžbenici), Novi Sad .Medić M. Novković. B. FTN (Edicija tehničke nauke-3, Zbirka rešenih zadataka iz Matematičke analize 1 2012 Carić, S. Medić, V. Ćurić, I udžbenici), Novi Sad I.Kovačević, B.Carić, S.Medić FTN (Edicija tehničke nauke-4. 2012 Testovi ispita iz Matematičke analize 1 udžbenici), Novi Sad

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:									
Course id:	E110		Fundamenta	ils of Electrical Engineerin	ig 2				
Number of ECTS:	9								
Teachers:		Bajović N	1. Vera, Đurić M. Nikola, Peka	rić-Nađ M. Neda					
Course status:		Mandato	ry						
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	cal classes: Other teaching types: Study research work: Other classes							
4	2	4 0 0 0							
Precondition courses			None						

1. Educational goal:

The course objective is to introduce students to electric and magnetic field terminology, to basic laws of electromagnetics and to enable students to analyze electric circuits of time-varying currents. In addition to analysis of simple sinusoidal current circuits, the objective is to enable students to analyze balanced three-phase networks. Also, the objective is to teach the students to calculate impedance and the basic parameters of the loads in such networks, resistors, coils, capacitors and coupled coils.

2. Educational outcomes (acquired knowledge):

The students who successfully complete the course are able to calculate magnetic field of simple symmetrical structures, to calculate the inductance of simple structure with the coils, to solve simple electric and magnetic circuits of sinusoidal currents, to calculate instantaneous, active, reactive and apparent power of the elements in the circuits and to correct power factor in single-phase and balanced three-phase circuits.

3. Course content/structure:

Time-invariant magnetic field, (Magnetic flux density vector, Biot-Savart Law, Magnetic flux, Ampere's Law, Ferromagnetic materials, Magnetic properties of materials, Boundary conditions, Magnetic circuits). Slowly time-varying electromagnetic field (Electromagnetic induction, Faraday's Law, Lentz's Law, Eddy currents, Skin effect and proximity effect, Self inductance and mutual inductance, Transformers, Energy and forces in magnetic field). Electric circuits of time-varying current (Simple sinusoidal current circuits, Impedance, Circuit analysis in frequency domain, Complex power, Maximum average power transmission, Power factor correction, Simple resonant circuits, Magnetically coupled circuits, Balanced three-phase systems).

4. Teaching methods:

The teaching process consists of lectures and tutorials, with occasional video presentations. The inductive method is applied in the lectures. The students' knowledge grows gradually, trough many simple problems solving.

	Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Test		Yes	10.00	Written part of the exam - tasks and theory	Yes	70.00				
Test		Yes	10.00							
Test	Test Yes 10.00									
			Liter	rature						

		Literature		
Ord.	Author	Title	Publisher	Year
1,	Branko D. Popović	Osnovi Elektrotehnike 2	Gradjevinska knjiga Beograd	2002
2,	N. Pekarić, V. Bajović	Zbirka rešenih ispitnih zadataka	Građevinska knjiga Beograd	2007

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:									
Course id:	E103	Physics							
Number of ECTS:	5								
Teachers:	Kozmidis-Luburić F. Uranija, Kozmidis-Petrović F. Ana, Satarić V. Miljko								
Course status:		Mandato	ry						
Number of active tead	ching classe	es (weekly	')						
Lectures:	Lectures: Practical classes: Other teaching types: Study research work: Other cl								
2	()	2	0	0				
Precondition courses			None						

1. Educational goal:

Provide students with basic knowledge in basic physics laws, particularly thermodynamics, wave motion and the basis of atomic physics, with an emphasis on their application in electronics.

2. Educational outcomes (acquired knowledge):

Acquired knowledge will be used in professional courses for understanding the physical essence of technical processes.

3. Course content/structure:

Atomic and molecular structure of matter. Maxwell and Boltzmann statistics of micro particles. Zero, first, second and third law of thermodynamics. Phase transitions, meting and boiling. Kinetic properties, diffusion, heat conduction, viscosity. Progressive mechanical waves. Ultrasound and application. Doppler effect and application. Physical and physiological sound intensity. Electromagnetic waves, the classical Hertzian dipole, Bohr model of the atom, Photon emission, Photo effect and Compton effect. De Brogile duality, electronic microscope. Geometrical optics, wave refraction, lens, microscope. Wave optics, interference, diffraction, dispersion, polarization. Elementary principles of Quantum Mechanics, Schrödinger equation, Heisenberg's principle. Fermi – Dirac

distribution.

4. Teaching methods:

Two logical wholes, thermodynamics and wave motion can be passed through two colloquiums. Colloquium is part of the examination. Colloquium and examination are written and oral. Written part is eliminating. Oral part is taken orally.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory Points									
Laboratory exercise defence	Laboratory exercise defence Yes 20.00 Coloquium exam Yes 70								
Lecture attendance	Lecture attendance Yes 10.00								
		Liter	ature						

		Literature		
Ord.	Author	Title	Publisher	Year
1,	M.V.Satarić	FIZIKA,(Termodinamika,Talasno kretanje i Osnove kvantne mehanike)	Fakultet tehničkih nauka, Novi Sad	2006
2,	M.V.Satarić i A.Mihajlović	Praktikum laboratorijskih vežbi iz fizike	Fakultet tehničkih nauka, Novi Sad	2010
3,	M.Satarić i drugi	Zbirka rešenih zadataka iz fizike I i II deo	Fakultet tehničkih nauka, Novi Sad	1998

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:									
Course id:	E111		Programming L	ogramming Languages and Data Structures					
Number of ECTS:	7								
Teachers: Malbaški T. Dušan, Popov B. Srđan									
Course status:		Mandato	Mandatory						
Number of active teac	hing classe	es (weekly	r)						
Lectures:	ectures: Practical classes: Other teaching types: Study research work: Other classes								
3 0 3 0									
Precondition courses			None						

1. Educational goal:

Introducing students to principles and techniques of creating programme procedures with a special emphasis on data structures.

2. Educational outcomes (acquired knowledge):

Students should be trained to design programmes in a specific programme language (programme language C).

3. Course content/structure:

An overview of programme languages. Basic and derived data types. Operations. Sequences. Selections. Cycles. Jumps. Modules. Files. Data structures: data structure definition, data structure classification, statistic structures (array, string), semi-dynamic structures (stack, line, deck, sequence), dynamic structures (lists, trees).

4. Teaching methods:

Lectures. Computer practice. Consultations. 70 out of 100 points are awarded during the lectures, and 30 points in theoretical part of the examination. In order to pass the examination, student must collect at least 55 points. Students who don't collect 25 points during the lectures (theoretical minimum) have to take written examination.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory Points Final exam Mandatory Points									
Comput	ter excersise defence		Yes	70.00	Theoretical part of the ex	am	Yes	30.00		
	Literature									
Ord.	Author			Title	:	Publishe	r	Year		
1, Kraus L. Programski jezik C sa rešenim primerima Mikro knjiga, Beograd								1994		
2, Malbaški D., Obradović D. Osnovne strukture podataka Univerzitet u Novom Sadu							1995			

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Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:									
Course id: EJ02L English Language – Pre-Intermediate									
Number of ECTS:	2								
Teachers: Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Iv									
Course status:		Mandato	ry						
Number of active tea	ching classe	es (weekly	r)						
Lectures: Practical classes: Other teaching types: Study research work: Other class									
2 0 0 0 0									
Decree ditions accommo									

Precondition courses

1. Educational goal:

Broadening the knowledge of the English language: broadening the vocabulary related to everyday situations, adoption of basic prefixes and suffixes, compound words and collocations, broadening the use of tenses, adoption of complex sentence structures.

2. Educational outcomes (acquired knowledge):

Students are able to use spoken and written English in everyday situations using wider word fund and more complex sentence structures.

3. Course content/structure:

Word formation (prefixes, suffixes, compound words), some phrasal verbs, collocations. Broadening the use of tenses (Present Continuous, Present Perfect Simple and Continuous, Past Perfect, Past Continuous, future forms). Adoption of a larger number of irregular verbs. First and Second Conditional.

4. Teaching methods:

Communicative method is used, since objectives and contents of the course are aimed at communication, which is very complex. This method contributes to balanced development of all language skills. The emphasis is placed on the student activities during lectures and their interaction with the teacher and among themselves.

Pre-examination obligations			Mandatory	Points	Final exam Mandatory F			Points
Test		Yes	10.00	Written part of the exam - tasks and theory Yes 70.			70.00	
Test			Yes	10.00				
Test Yes 10.00								
	Literature							
Ord.	Author			Title	:	Publishe	r	Year
1,	John and Liz Soars	New H	leadway Pre-	Intermedi	ate	Oxford University P	ress, Oxford	2002
2,	John Eastwood	Oxford	Oxford English Grammar Intermediate Oxford University Press, Oxford			ress, Oxford	2006	
3,	Grupa autora	Oxford	Oxford English -Serbian Dictionary Oxfor			Oxford University P	ress	2006

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Table 5.2 Course specification

Course:										
Course id:	E121		Mathematical Analysis 2							
Number of ECTS:	7									
Teachers:		Stojaković M. Mila, Kostić Z. Marko, Adžić Z. Nevenka								
Course status:	Course status: Elective									
Number of active teac	hing classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	3	3	0	0	0					
Precondition courses			None							

1. Educational goal:

Ability of abstract thinking and acquiring basic knowledge in the field of mathematical analysis.

2. Educational outcomes (acquired knowledge):

Student is competent to design and solve mathematical models in the field of mathematical analysis (array theory, integral functions of several variables, complex analysis) in further education and professional courses.

Course content/structure:

Number series, function series, power series. Double and curvilinear integral. Complex analysis-basic terms related to complex function of a complex variable, integral, Cauchy's theorem and formula, Laurent series, singularities, residue, analytic continuation, conformal mapping.

4. Teaching methods:

Lectures; Numerical computing practice. Consultations. Lectures are combined. In lectures, theoretical part of the course taught is followed by typical examples for better understanding. In practice, which accompanies lectures, typical problems are solved and knowledge from the lectures is deepened. Besides lectures and practice, consultations are held on a regular basis. Part of the course, presenting a logical whole, can be passed during the teaching process in the form of the following 3 modules (the first module: array, the second module: integral function of several variables, the third module: complex analysis). The oral part of the examination is not obligatory.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam Ma		Mandatory	Points	
Exercise attendance			Yes	5.00	Written part of the exam - tasks and theory		Yes	55.00	
Test			Yes	30.00	Oral part of the exam		Yes	10.00	
	Literature								
Ord.	Author		Title			Publishe	r	Year	
1,	Mila Stojaković,		flatematička analiza 2 Vedes			Vedes, Beograd		2002	
2,	Nebojša Ralević, Lidija Čomić		Zbirka zadataka rešenih sa pismenih ispitaiz natematička analiza 2			FTN		2003	
		maten	iaticka arializ	.a 2					

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Power, Electronic and Telecommunication
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Table 5.2 Course specification

Course:										
Course id:	E122		Introduction to Electronics							
Number of ECTS:	7									
Teacher:		Stojanov	tojanović M. Goran							
Course status:		Elective	Elective							
Number of active tea	ching classe	es (weekly	')							
Lectures:	Lectures: Practical classes: Other teaching types: Study research work: Other clas									
3	2	2	1	0	0					

Precondition courses

1. Educational goal:

Gaining basic knowledge in the filed of principles of analog-digital conversion, semiconductor electronic components (diodes, transistors, JFET, MOSFET) amplifiers.

- 2. Educational outcomes (acquired knowledge):
- -ability to solve basic electric circuits with operational amplifiers
- -ability to solve basic electric circuits with semiconductor devices (diodes, bipolar transistors, MOSFET)
- -ability to record the static characteristics of semiconductor components
- -ability to analyze basic electronic circuits using computer-a software package SPICE

3. Course content/structure:

History of electronics. Classification of electronic signals, principles of their conversion. The frequent spectrum of electronic signals. Amplifiers (non-inverting and inverted amplifiers, differential amplifiers, application). Operational amplifiers. Basic physical properties of semiconductors (self and impurity semiconductors). Transport phenomena in semiconductors (current drift and diffusion currents). PN junction (direct and reverse polarization PN junction, the capacitance of PN junction, breakdown voltage). Diodes (basic concepts, the influence of temperature, breakdown, polarization, circuit analysis with diodes, switching mode). Diodes of reference voltage. Application of diodes (voltage control, unilateral and bilateral routers). Bipolar transistors (Polarization of the transistor, limits in operation, modes, equivalent circuit for small signals). The application of transistors (Transistor as a switch, inverted circuit with transistor). Field effect transistors. JFET. MOSFET integrated with induced channel (mode, modes, features). Polarization MOSFET. Equivalent circuit for small signals. MOSFET as a switch. Single stage amplifiers with bipolar transistors. Fet single stage amplifiers. Differential amplifiers with bipolar transistors or MOSFET. Analysis of electronic circuits using computer – SPICE.

4. Teaching methods:

Lectures; Auditory practice; Computer practice; Laboratory practice; Consultations.

	Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	Final ex	Final exam		Points		
Laboratory exercise attendance		Yes	5.00	Written part of the exam	Written part of the exam - tasks and theory Yes		70.00			
Laboratory exercise defence		Yes	20.00	Coloquium exam No		45.00				
Lecture attendance			Yes	5.00						
	Lit				ature					
Ord.	Ord. Author			Title	;	Publishe	er	Year		

Ord.	Author	Title	Publisher	Year
1,	M. Živanov	Elektronika, komponente i pojačavačka kola	FTN, Novi Sad	2001
2,	S. Tešić, D. Vasiljević	Osnovi elektronike	Grosknjiga, Beograd	1994
3,	R. Jaeger	Microelectronic Circuit Design	The McGraw-Hill Companies, Inc., New York	1997
4,	Dragan Pantić, Miomir Đukić	Izvori napajanja	Commerce print	1990
5,	M. Hribšek, M. Ilić, D. Vasiljević	Analogna elektronika - zbirka rešenih zadataka	Elektrotehnički fakultet, Beograd	1991

ASTRAS STUDIO

UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E126		System Control, Modeling and Simulation							
Number of ECTS:	7									
Teachers:		Bekut D. Duško, Erdeljan M. Aleksandar								
Course status:	ourse status: Elective									
Number of active teac	hing classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	1	1	0							
Precondition courses			None							

1. Educational goal:

Mastering theoretical and practical basics of system control, modeling and simulation.

2. Educational outcomes (acquired knowledge):

Acquired knowledge can be used in solving specific engineering problems, and also present a basis for further attendance of professional courses.

3. Course content/structure:

System modeling, Mathematical models, Application of Laplace transformation; Transmission function; Modeling in space state; State space analysis; Features and system performance; Stability analysis; Algebraic criteria; System control, PID controllers; Introduction to automatic control digital systems; Simulation systems and simulation languages (Matlab/Simulink); Computer simulation: models and analysis;

4. Teaching methods:

Examination is written and oral. Written part of the examination is eliminatory. Course grade is formed based on the success in homework assignments, laboratory and computer practice, written and oral part of the examination.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points						
Homework	Yes	5.00	Coloquium exam	No	20.00						
Homework	Yes	5.00	Coloquium exam	No	20.00						
Homework	Yes	5.00	Oral part of the exam	Yes	30.00						
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	40.00						
Test	Yes	10.00									

Ord. Author Title Publisher 1, Petkovska MATLAB i dodatni moduli Control System Toolbox i SIMULINK Mikro knjiga, Beograd	Year 1995
I 1 I / I Mikro knjiga Beograd	1995
2, A. Erdeljan, D. Čapko Štampani materijal koji pokriva predavanja i vežbe	2005
3, M. Stojić Kontinualni sistemi automatskog upravljanja Naučna Knjiga, Beograd	2000
4, B. Kovacević, Ž. Đurović Sistemi automatskog upravljanja - zbornik rešenih nauka, Beograd	2000

A STUDIO

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:		Oissa als sand Overtains								
Course id:	EK201		Signals and Systems							
Number of ECTS:	7									
Teacher:		Trpovski	povski V. Željen							
Course status:		Elective	Elective							
Number of active teac	hing classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2	1	0	0					
Precondition courses			None							

1. Educational goal:

Understanding the role of signals in modern communication systems, methods for signal analysis and processing and system analysis.

2. Educational outcomes (acquired knowledge):

Learning properties of signals, systems and procedures for their analysis and processing. Application of certain procedures for signal transmission and processing in modern communication systems.

3. Course content/structure:

Model of communication system. Information. The amount of information.

Signal definition, types and properties. Signal analysis.

Linear, non-linear and combined systems.

Signal digitization. Sampling, quantization and coding.

Analog and digital modulation.

4. Teaching methods:

Lectures, Computing practice and Laboratory practice.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points						
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00						
Homework	Yes	5.00									
Homework	Yes	5.00									
Lecture attendance	Yes	5.00									
Test	Yes	10.00									

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	Željen Trpovski	Osnovi telekomunikacija	Katedra za telekomunikacije FTN Novi Sad	2004					

STAS STUDIO

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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:						
Course id:	E128A	Electrical Circuit Theory				
Number of ECTS:	7					
Teachers:		Dautović	B. Staniša, Novak O. Ladislav	1		
Course status:		Elective				
Number of active teaching classes (weekly)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:	
3		1	1	0	1	
Precondition courses			None			

1. Educational goal:

To provide general insight in fundamental aspects of electrical circuit theory including an overview of algorithms for linear, time-invariant RLC electrical circuit analysis in time and frequency domain.

2. Educational outcomes (acquired knowledge):

Students who successfully complete this course will gain insight in basic concepts of electrical circuit theory including: - understanding of general description of terminal behavior of electrical circuit elements with concentrated and distributed parameters and different ways of linking them - review of the qualitative properties of electrical circuits (Electrical circuit theorems) - Algorithms for the analysis of linear time-invariant RLC electrical circuits in the time and frequency domain.

3. Course content/structure:

Fundamental aspects of electrical circuits, description of terminal behavior of circuit elements, their classification and connection. Resistive circuits, Analysis of linear time-invariant resistive circuits. RLC circuit in time domain. Analysis of linear time-invariant RLC circuit in frequency domain. S-parameters. Theorem of electrical circuits. Circuits containing elments with distributed parameters.

4. Teaching methods:

Lectures; Auditory practice; Computer practice; Laboratory practice; Consultations.

Knowledge evaluation (maximum 100 points)					
Pre-examination obligations Mandatory Points			Final exam	Mandatory	Points
Computer excersise defence	Yes	20.00	Written part of the exam - tasks and theory	Yes	70.00
Exercise attendance	Yes	5.00	Coloquium exam	No	20.00
Lecture attendance	Yes	5.00		-	

		Literature		
Ord.	Author	Title	Publisher	Year
1,	-	Teorija električnih kola I	Naučna knjiga	1991
2,	-	Teorija električnih kola II	Naučna knjiga	1995
3,	Dautović, Staniša	Računarske vežbe iz teorije električnih kola	Skripta	2007
4,	Milić Mirko	Teorija električnih kola, zbirka rešenih problema	Naučna knjiga	1990
5,	Nilsson, J.W., Reidel, S.A.	Electric Circuits	Prentice Hall	2001
6,	Chua, L.O., Desoer, C.A., Kuh, E.S.	Linear and Nonlinear Circuits	McGraw-Hill Book Company	1987
7,	Omar Wing	Classical Circuit Theory	Springer Verlag	2010

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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:						
Course id:	E135	Probability, Statistics and Stochastic Processes				
Number of ECTS:	7					
Teachers:		Grbić P.	Tatjana, Stojaković M. Mila, M	ihailović P. Biljana		
Course status:		Elective				
Number of active teaching classes (weekly)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:	
3	2	2	1	0	0	
Precondition courses			None			

1. Educational goal:

Ability of abstract thinking and acquiring basic knowledge in the area of probability, statistics and stochastic processes.

2. Educational outcomes (acquired knowledge):

In their further education and professional subjects students are competent to develop and solve mathematical models in the area of probability, statistics and stochastic processes.

3. Course content/structure:

Basic definitions in probability, conditional probability and Bayes' formula. Random variable of discrete and continuous type, distribution functions. Two dimensional random variable. Conditional distribution. Numeric characteristics – expectation, dispersion, covariance, correlation. Conditional expectation. Limit theorems. Statistics – point estimate and interval estimate, parametric and nonparametric hypotheses and significance testing. Stochastic processes – general notions. Stochastic process transformation- derivative, integral. Poisson process, white noise, telegraph signal. Markov chains and processes, birth-death process, mass service systems. Stationary process. Mass service systems.

4. Teaching methods:

Lectures, Numerical calculation practice and computer practice (statistics). Consultations. Lectures are conducted combining theoretical part of the subject matter with characteristic examples which facilitate understanding. During practice classes, which accompany the lectures, some characteristic problem tasks are done and the presented material is discussed in more detail. In addition to the lecture and practice classes there are regular consultations. Parts of the course which form a logical unit can be taken during the course in the form of 4 partial exams based on the modules (module one: probability theory, module two: random variable, module three: statistics, module four: stochastic processes). The oral part of the final exam is not obligatory.

Pre-examination obligations Mandatory Points Final exam Mandat Exercise attendance Yes 5.00 Written part of the exam - tasks and theory Yes Test Yes 30.00 Oral part of the exam Yes Literature	9 Points 55.00 10.00				
Test Yes 30.00 Oral part of the exam Yes					
Teo Tar part of the oxigin	10.00				
Literature					
Literature					
Ord. Author Title Publisher	Year				
1, Mila Stojaković Slučajni procesi Symbol, Novi Sad	200				
2, Tatjana Grbić, Ljubo Nedović Zbirka rešenih zadataka sa pismenih ispita iz verovatnoće FTN, Novi Sad	2002				

TAS STUDIO

UNIVERSITY OF NOVI SAD

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	EJ03Z		English Language - Intermediate							
Number of ECTS:	2									
Teachers:	Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafra F. Jelisaveta									
Course status:		Elective								
Number of active tea	ching classe	es (weekly	·)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	(0 0 0								
Dunas didina assuma										

Precondition courses

1. Educational goal:

Further improvement of English vocabulary through expansion of acquired vocabulary and adoption of more complex sentence structures adequate to the purpose and the situation in which the language is used. Expanding the vocabulary with terms that are not related only to the immediate surrounding. Developing the ability to express thoughts and feelings more precisely and clearly.

2. Educational outcomes (acquired knowledge):

Students are able to use language knowledge and skills in different life situations using adequate vocabulary and sentence structures. Students are able to adjust their style and register expression to some extent, depending on the situation. Students are able to read more complex texts and interpret and comment on ideas presented in them.

3. Course content/structure:

Vocabulary related not only to immediate surrounding, but a number of abstract terms. Text reproduction from various sources, written in a variety of styles and registers. Word formation related to the construction of abstract nouns, expressing the subject, construction of adverbs, the use of negative prefixes, etc. The use of Passive voice. The use of Conditional Sentences (First, Second and Third Conditional). Systematization of the use of tenses.

4. Teaching methods:

The emphasis is placed on the student activities during the class, their interaction with the teacher and between themselves. The communicative approach is used in the foreign language courses.

Knowledge evaluation (maximum 100 points)

	Pre-examination obligations		Mandatory	Points	Final exam		Mandatory	Points	
Test			Yes	10.00	Written part of the exam	- tasks and theory	Yes	70.00	
Test			Yes	10.00				-	
Test			Yes	10.00					
	Literature								
Ord.	Author		Title			Publishe	r	Year	
1,	John and Liz Soars	New H	leadway Inter	mediate(odabrana poglavlja)	Oxford University P	ress, Oxford	2000	
2,	John Eastwood	Oxford	Oxford English Grammar Intermediate			Oxford University P	ress, Oxford	2006	
3,	Grupa autora	Oxford	Oxford English - Serbian Dictionary			Oxford University P	ress, Oxford	2006	

DE STUDIO

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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



1996

FTN, Novi Sad

Table 5.2 Course specification

Course:			Develop For all a saile a Constant							
Course id:	E129A		Power Engineering Systems							
Number of ECTS:	7									
Teacher:		Strezosk	Strezoski C. Vladimir							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2	0	0	1					
Precondition courses			None							

1. Educational goal:

Place of electricity in the power sector. The basic orientation in the power engineering (DC or AC, single phase or three-phase electrical energy, frequency and voltage). Structure and elements of power systems. The idea of reactive power and two-dimensional power balance.

2. Educational outcomes (acquired knowledge):

Basic knowledge about alternating three-phase electrical energy and power engineering systems (transmission, manufacturing and distributive networks).

3. Course content/structure:

Fundamentals of power. Fundamentals of power engineering: historical development, fundamentals of power engineering systems, three-phase power systems. Basic elements of power engineering systems: consumers, lines, transformers, alternating machines, dis tribution systems. Electric power balance: regulation of electric power systems, the setting and solution of power balance problems-problems of power flow.

4. Teaching methods:

Lectures; Auditory Practice; Consultations.

V.C.Strezoski:

	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points			
Exercise attendance		Yes	5.00	Written part of the exam - tasks and theory Yes		70.00					
Lecture	attendance		Yes	5.00				,			
Term pa	Term paper		Yes	20.00							
	Literature										
Ord.	Author		Title Publisher				er	Year			

Osnovi elektroenergetike

UNIVERSITY OF NOVI SAD



FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:			_						
Course id:	E138A		Digital Electronics						
Number of ECTS:	7								
Teachers:		Nađ F. L	Nađ F. Laslo, Damnjanović S. Mirjana						
Course status:		Elective							
Number of active tead	ching classe	es (weekly)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	2	1 0 0							

Precondition courses

1. Educational goal:

Acquiring knowledge in the field of digital electronics: the way of presentation of logical functions, minimization of logical functions and realization with basic logic circuits. The basic theoretical knowledge from Boolean algebra will be linked to practical aspects of analysis and realization of combination and sequential networks. The basic problems, causes of irregular operation and methods of their elimination will be studied.

2. Educational outcomes (acquired knowledge):

A student who successfully completes this course will be able:

- to successfully present logic functions in different ways;
- to analyze work and carry out synthesis of simple combination and sequential digital networks;
- to detect and eliminate basic hazardous phenomena in digital networks;
- to successfully use basic digital functional blocks
- to expand the capacity of basic digital functional blocks, if necessary, and
- to do computer simulation of basic digital networks, after computer practice is done.

3. Course content/structure:

Introduction to digital signal processing. The methods of presentation of logical functions. Minimization of completely and incompletely defined logic functions. Realization of logic functions given the type of logic gates. Analysis of combinational networks, elimination of hazards. Latches and flip-flops. Analysis and synthesis of synchronous sequential networks (implemented through flip-flops). Analysis and synthesis of asynchronous sequential networks (implemented through latches or through feedback through combinatinal network). The basic combination and functional blocks (encoders, decoders, code converters, multiplexers, demultiplexers, combinational arithmetic-logic unit. Basic sequential functional blocks (registers, counters). The basics of programmable combinational and sequential components.

4. Teaching methods:

Lectures; Auditory Practice; Laboratory Practices; Consultations.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Homework	Yes	5.00	Written part of the exam - tasks and theory	Yes	60.00			
Homework	Yes	5.00	Coloquium exam	No	20.00			
Laboratory exercise defence	Yes	30.00						

	•		100				
				Liter	ature		
Ord.	Author			Title	•	Publisher	Year
1,	L.Nađ, M.Damnjanović	Skripta	iz digitalne	elektronik	e	FTN, Novi Sad	2006
2,	M.Damnjanović, L.Nađ				gitalne elektronike	FTN, Novi Sad	2007
3,	L.Nađ, M.Damnjanović	digitaln	e elektronik	Э	ooratorijske vežbe iz	FTN, Novi Sad	2007
4,	S.Tešić, D.Vasiljević		elektronike, na kola, digit		ente, pojačavačka kola,	Građevinska knjiga	2005
5,	D.Živković, M.Popović	Impuls	na i digitalna	elektronil	ka (Glave 11 - 15)	Nauka i ETF Beograd	1992

TAS STUDIO

UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:										
Course id:	EIPR1		Laboratory practicum							
Number of ECTS:	6									
Teachers:		Mitrović I	litrović Lj. Zoran, Pejić V. Dragan, Bojković J. Gordana							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
1	()	2	0	1					
Precondition courses			None							

1. Educational goal:

Acquisition of basic knowledge about the application, its significance and trends of further development of measurement systems. The acquisition of basic knowledge of the field of electrical measurement and instrumentation. The acquisition of basic knowledge and skills in laboratory and experimental work.

2. Educational outcomes (acquired knowledge):

Students should understand the application, the importance and trends of further development of measurement systems. Students should understand the fundamentals and the importance of the electrical measurement and instrumentation. Students will learn to work in the lab. Gaining basic knowledge of the experimental work. Knowledge gained should be used by students during their education.

3. Course content/structure:

The application of measurement systems in the power and energy sector. The application of measurement systems in the industry. The application of measurement systems in biomedicine and biotechnology. The application of measurement systems in environmental protection. The application of measurement systems in agriculture. Measurement systems as interdisciplinary connection between electrical engineering and computer science. The implementation of modern technology achievements in measuring systems. Measurement, Metrology, Quantities and units, systems and units, SI. Standards and common instruments. Measuring Sources: Sources of direct current / voltage, sources of AC current / voltage, variable transformers, function generators, frequency synthesizers, calibrators. Analog instruments: ammeters / voltmeters, universal instruments, wattmeters, oscilloscopes. Digital instruments: counter / timer / frequency meters, multimeters, oscilloscopes. Sensors and transducers. Auxiliary equipment: rheostats, potentiometers, decade boxes of resistance, capacitance and inductance. Virtual instruments. Distant laboratories.

4. Teaching methods:

Lectures, laboratory practice, consultations.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory P				Final ex	am	Mandatory	Points			
Labora	Laboratory exercise defence			30.00	Written part of the exam	tasks and theory	Yes	40.00			
	Oral part of the exam							30.00			
	Literature										
Ord.	Author			Title		Publishe	er	Year			
1,	Zoran Mitrović, Marjan Urekar				ektričnih merenja	FTN Novi Sad		2009			
2,	2, Zoran Mitrović Sajt predmeta sa pripremama za laboratorijske vežbe i ostalim aktuelnim informacijama							2012			

UNIVERSITY OF NOVI SAD



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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:		Development Tools for Communications and Signal Processing							
Course id:	EK200		2						
Number of ECTS:	7								
Teacher:		Vukobrat	/ukobratović V. Dejan						
Course status:		Elective							
Number of active tead	hing classe	s (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	0)	3	0	0				
Precondition courses			None						

1. Educational goal:

Introduction to object-oriented design principles and standard languages for designing and specifying telecommunications systems. The course will begin with an overview of basic concepts, structures and syntax and shows how to specify protocols with object-oriented description languages (SDL).

2. Educational outcomes (acquired knowledge):

The student is given practical knowledge of object-oriented design principles and the definition and specification of communication protocols within an object-oriented language for the description of the system (SDL language).

3. Course content/structure:

Introduction, object model, classes and objects, classification. Class diagrams, objects, state transitions. Processes and management. Application of object-oriented design. Specification of communication protocols using formal or graphical notation. Description of syntax and semantics through standard SDL(Specification and Description Language). Communication systems description in SDL. SDL structure, data types, abstract data types, communication paths. Examples of communication protocols in SDL.

4. Teaching methods:

Lectures and lab exercises.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations			Points	Final ex	Final exam		Points			
Project		Yes 50.00 Practical part of the exam - tasks				n - tasks	Yes	50.00			
	Literature										
Ord.	Author			Title	•	Publishe	er	Year			
1,	Jon Elsberger, Dieter Hogrefe, Amardeo Sarma		ormal Objectunicating Sys		I Language for	Prentice Hall		1997			
2,	Grady Booch	Object Applica	-Oriented An ations	The Benjamin-Cum Publishing	mings	1994					

TAS STUDIOS

UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:			Practicum in electronics engineering tools							
Course id:	E139A									
Number of ECTS:	2									
Teachers:										
Course status:		Elective								
Number of active tead	hing classe	es (weekly)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
0	()	1	0	1					
Precondition courses			None							

1. Educational goal:

Introducing students to specific application of modern software packages in electronics.

- 2. Educational outcomes (acquired knowledge):
- students' ability to independently design a PCB of one simple electronic circuit in the programming environment.
- the ability to analyze simple electronic circuit using the software package MCap7
- the ability to simulate analog and digital electronic circuits using the modern software packages SPICE, MCap7.

3. Course content/structure:

Introduction to Protel software package. Doing a project assignment in this software package. Introduction to Windows oriented SPICE programme MCap version 7. Application of MCap7 in the simple analog circuits, such as inverting, non-inverting amplifiers based on the OP. Determining different forms of offsets of OP and the methods for determining their values. Determining the voltage gain of linear circuits with OP (inverting and non-inverting configuration). Operation analysis of amplifiers with a common emitter. Determining the input and output resistance. Determining the voltage gain with transmissive properties, from the results of transient analysis and based on the results of AC analysis. Determining the limits of the field of linear work with transmissive properties based on the results of transient analysis. Understanding the MCap7a during simulation of digital circuits. The basic elements of digital simulation (fixed digital value, the signal generator and how it is programmed, the results and their control, etc.)

4. Teaching methods:

Computer Practice. Laboratory Practice. Consultations. Smaller independent project.

	Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	Final ex	xam Mandatory		Points		
Laboratory exercise attendance			Yes	5.00	Practical part of the exan	n - tasks				
Laborat	Laboratory exercise defence			45.00						
				Liter	ature					
Ord.	Author	Title				Publishe	r	Year		
1,	Mirjana Videnović-Mišić	Praktil	Praktikum za inženjerske alate u elektronici (skripta) FTN, Novi Sad					2007		

TO STUDIO

UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E128F		Electrical Circuit Theory							
Number of ECTS:	7									
Teachers:		Dautović B. Staniša, Novak O. Ladislav								
Course status: Elective										
Number of active tea	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2	1	0	0					
Precondition courses			None							

1. Educational goal:

To provide general insight in fundamental aspects of electrical circuit theory including an overview of algorithms for linear, time-invariant RLC electrical circuit analysis in time and frequency domain.

2. Educational outcomes (acquired knowledge):

Students who successfully complete this course will gain insight in basic concepts of electrical circuit theory including:

- understanding of general description of terminal behavior of electrical circuit elements with concentrated and distributed parameters and different ways of linking them
- review of the qualitative properties of electrical circuits (Electrical circuit theorems)
- Algorithms for the analysis of linear time-invariant RLC electrical circuits in the time and frequency domain.

3. Course content/structure:

Fundamental aspects of electrical circuits, description of terminal behavior of circuit elements, their classification and connection. Resistive circuits, Analysis of linear time-invariant resistive circuits. RLC circuit in time domain. Analysis of linear time-invariant RLC circuit in the stiff sinusoidal and frequency domain. Theorem of electrical circuits. Circuits with distributed parameters.

4. Teaching methods:

Lectures; Auditory practice; Computer practice; Laboratory practice; Consultations.

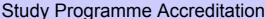
	Manufacture analysis (manifacture 400 maints)										
Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points Final exam Mandatory Point											
Computer excersise defence	Yes	20.00	Written part of the exam - tasks and theory	Yes	70.00						
Exercise attendance	Yes	5.00	Coloquium exam	No	20.00						
Lecture attendance	Yes	5.00									
		Liter	rature								

	Literature										
Ord.	Author	Title	Publisher	Year							
1,	-	Teorija električnih kola I	Naučna knjiga	1991							
2,	-	Teorija električnih kola II	Naučna knjiga	1995							
3,	Dautović, Staniša	Računarske vežbe iz teorije električnih kola	Skripta	2007							
4,	Milić Mirko	Teorija električnih kola, zbirka rešenih problema	Naučna knjiga	1990							
5,	Nilsson, J.W., Reidel, S.A.	Electric Circuits	Prentice Hall	2001							
6,	Chua, L.O., Desoer, C.A., Kuh, E.S.	Linear and Nonlinear Circuits	McGraw-Hill Book Company	1987							

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:											
Course id:	EE204		Selected Chapters in Mathematics								
Number of ECTS:	7										
Teachers:		Kovačević M. Ilija, Teofanov Đ. Ljiljana									
Course status: Elective											
Number of active tead	hing classe	es (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3	2	2	1	0	0						
Precondition courses			None								

1. Educational goal:

Ability of abstract thinking and acquiring basic knowledge in Laplace transform and its applications, application of differential calculus function of several variables, Numerical mathematics. Integration of function of several variables and field theory. Fourier transform and Fourier series.

2. Educational outcomes (acquired knowledge):

In their further education students are competent to develop and solve mathematical models in their professional subjects using the acquired knowledge from Discrete Algebra and Mathematical Analysis.

3. Course content/structure:

Theoretical part: Application of differential calculus of functions of several variables. Laplace transform. Power series solution of differential equations. Numerical solutions to differential equations. Numerical integration and some numerical methods for solving differential equations. Triple and surface integrals. Integral formulas: Stokes and Gauss-Ostrogradski formula. Vector analysis (field theory). Fourier series, integrals and Fourier transform. Practical part: In practical classes suitable examples from theoretical part of the course are done thus contributing to better understanding of the material.

4. Teaching methods:

Lectures, Numerical calculation practice and computer practice. Consultations. Lectures are conducted combining theoretical part of the subject matter with characteristic examples which facilitate understanding. During practice classes, which accompany the lectures, some characteristic problem tasks are done and the presented material is discussed in more detail. In addition to the lecture and practice classes there are regular consultations. Parts of the course which form a logical unit can be taken in the form of 3 partial exams during the term based on the modules (module one: Laplace transform-part one, extreme values of functions of several variables; Fourier series and integrals, power series solution of differential equations; module two: triple and surface integrals, field theory; module three: numerical analysis, Fourier and Laplace transform).

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points						
Complex exercises	Yes	15.00	Final exam - part one	No	50.00						
Exercise attendance	Yes	3.00	Final exam - part two	No	50.00						
Lecture attendance	Yes	2.00	Written part of the exam - tasks and theory	Yes	50.00						
Test	Yes	10.00		-							
Test	Yes	10.00									
Test	Yes	10.00									

Literature Ord. Author Title Publisher Year N. Ralević, S.Medić FTN, Novi Sad 2002 Matematika 1 - drugi deo I.Kovačević, N.Ralević, V.Ćurić FTN (Edicija tehničke nauke-2012 Integrali funkcija više promenljivih i teorija polja ,V.Marić udžbenici), Novi Sad 3, M.Stojaković Matematička analiza 2 Symbol Novi Sad 2007

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FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E131		Object-Oriented Programming							
Number of ECTS:	7									
Teachers:		Kupusina	upusinac D. Aleksandar, Malbaški T. Dušan							
Course status:		Elective								
Number of active teac	hing classe	es (weekly)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	3	3	0	0	0					
Precondition courses			None							

1. Educational goal:

Introducing students to the principles, techniques and ways of use of the object methodology and technology for software design.

2. Educational outcomes (acquired knowledge):

Students should be trained to use object approach for direct programme design in the specific object programme language.

3. Course content/structure:

Problem domain, model, implementation. Basic concepts and terms. Abstraction and hiding the information. Implementation of the class. Operation classification. Constructors and destructors. A concept and types of polymorphism. Operator overloading. Association. Aggregation. Inheritance. Links on usage. Generic class. Managing exceptions.

4. Teaching methods:

Lectures. Computer Practice. Consultations. 70/100 points can be awarded during the class, and 30 in the theoretical part of the examination. The examination prerequisites include two little projects (15 points each) and four test (10 points each) which totals 70 points. In order to pass the course, a student must collect at least 55 points. Students who don't collect 25 points during the lectures (which is a theoretical minimum) have to take the written examination.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory	Final ex	kam	Mandatory	Points			
Compu	ter excersise defence		Yes	70.00	Theoretical part of the ex	exam Yes		30.00		
	Literature									
Ord.	Author			Title		Publishe	r	Year		
1,	Kraus L.	Programski jezik C++				Mikro knjiga, Beogra	ad	1994		
2,	2, Malbaški D. Objekti i objektno programiranje					Univerzitet u Novon	n Sadu	1998		

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E142		Measuring Instruments							
Number of ECTS:	8									
Teachers:		Mitrović Lj. Zoran, Župunski Ž. Ivan								
Course status:	Course status: Elective									
Number of active tea	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(0	3	0	0					
Precondition courses			None							

1. Educational goal:

Acquiring knowledge on the architecture of the measuring instruments. Enabling students to properly use measuring instruments, while being introduced to the measuring methods and application and limitations.

2. Educational outcomes (acquired knowledge):

Students are able to use measuring instruments properly. Introduction to the operation of the measuring instruments and measuring methods. Introduction to the application range and limitations. Introduction to the architecture of the measuring instruments.

3. Course content/structure:

Architecture of the analog measuring instruments. Application of operational amplifiers in the measuring instruments. Introduction to the architecture of the processors and computers used in the measuring instruments. Architecture of the A/D converters. Digital elements of the measuring instruments. Practical application of the acquired knowledge.

4. Teaching methods:

Lecture. Laboratory Practice.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory Points				Final ex	xam	Mandatory Yes No				
Laborate	ory exercise defence		Yes	30.00	Written part of the exam	- tasks and theory	Yes	40.00			
					Coloquium exam		No	20.00			
					Coloquium exam		No	20.00			
				Oral part of the exam		Yes	30.00				
				Liter	ature						
Ord.	Author			Title	•	Publishe	er	Year			
1,	Zoran Mitrović	Merni	Merni instrumenti			Merni instrumenti		FTN Novi Sad		2012	
2,	2, Zoran Mitrović Merni instrumenti - praktikum			1	FTN Novi Sad		2012				

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:											
Course id:	EK203		Modelling and Simulation of Communication Systems								
Number of ECTS:	7										
Teacher: Vukobratović V. Dejan											
Course status:		Elective	Elective								
Number of active tead	ching classe	es (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3		1	2	0	0						
Precondition courses			None								

1. Educational goal:

Acquisition of basic knowledge about the communication systems: basic blocks and their roles on the transmit side, the basic characteristics of the channel and the basic blocks and their characteristics on the receiving side. Students should gain knowledge about the operation of each block of a typical communication system and the ability to provide basic implementation of each of the blocks in MATLAB. In addition, the student should gain a global picture of the sequence of processing performed by each of the blocks and the ability to implement a complete communication chain for the realization of basic communication systems in MATLAB and interpret the results.

2. Educational outcomes (acquired knowledge):

Students who successfully master the material in this course will be able to: - Identify and explain the basic blocks of the communication system on the side of the transmitter and the receiver and describe their main features - Implement a basic implementation of each of the communication units using MATLAB's Communications Toolbox and set its basic parameters - Implement a complete simulation chain of the basic realization of the communication system in MATLAB and adjusts and adapts to the basic parameters of the basic blocks within a complex system - Present and interpret the results of a simulation of communication systems in MATLAB

3. Course content/structure:

Getting to know your subject. Introduction to MATLAB. Short repetition of basic concepts in MATLAB: script files, functions, vectors and matrices, useful built-in functions. An intuitive introduction to signals in communication: information-carrying signal as analog and digital signals, the signals in the baseband and modulated signals, signal strength, signal spectrum, spectrum efficiency. Signal generation in MATLAB. An intuitive introduction to communication channels, transmission media: wired and wireless transmission channel noise, the basic channel models: a channel with Gaussian noise, the signal-noise ratio in the channel. More advanced models of communication channels, and their parameters. Generating channel model in MATLAB. The basic model of the communication system. Description and sequence of individual blocks at sender and receiver side. Implementation of the basic model of the communication system in MATLAB. Methods of calculating the probability of errors in transmission, the bit error probability and the probability of error messages through simulation experiments. The signal source. Fundamentals of signal compression. Algorithms for quantization and signal compression in MATLAB. Basic principles and implementation of protective coding information. Protective coding algorithms in MATLAB. Basic principles of digital modulation. Examples of modulation scheme and implementation in MATLAB. Basic principles of design communication receivers. Equalization procedure. Examples of implementation of the equalizer in MATLAB. Basic principles simulations of the complete communication system. Examples of implementation of basic communication systems in MATLAB. Execution of simulation experiments and display in MATLAB.

4. Teaching methods:

Lectures, lab exercise

	Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory Po										
Project	roject		Yes	30.00	Practical part of the exan	- tasks Yes		70.00		
Literature										
Ord.	Author		Title Pub					Year		
1,	John Proakis, Masoud Salehi, Gerhard Bauch	Contemporary Communication Systems using MATLAB Cengage						2012		

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:										
Course id:	E133		ŀ	Power Converters						
Number of ECTS:	7									
Teachers:		Marčetić	rčetić P. Darko, Vasić V. Veran							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3		1	2 0 0							
Precondition courses			None							

1. Educational goal:

Acquiring the basic knowledge in the field of electromechanical energy conversion, electric machines, power electronic devices and electrical drives.

2. Educational outcomes (acquired knowledge):

- understanding the basic principles of electromechanical conversion of energy
- understanding the basic features and ways of operation of rotating machines
- understanding the basic features and ways of operation of static electric machines transformers
- understanding the basic features and ways of operation of the power electronic devices and their application
- understanding the basics of electrical drives

3. Course content/structure:

The basic principles of electromechanical energy conversion. Power balance of electric machines. Types of rotating machines. Alternating machines. Tesla's rotating field. Asynchronous machines. Synchronous machines. Direct current machines. Static electric machines – transformers. Other electric machines. Little and micro-motors. Power electronic devices. Fundamentals of electrical drives.

4. Teaching methods:

A course is taught through lectures and practice. In lectures, modern illustrations for intuitive understanding of the taught matter are used. In order to fully master the course matter, students solve problems in auditory practice, which accompanies lectures, thus enabling students to independently solve problems from the engineering practice. A part of the practice is carried out in the laboratory.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations		Mandatory	Final ex	kam	Mandatory	Points					
Comple	ex exercises		Yes	20.00	Written part of the exam	- tasks and theory	Yes	30.00				
Exercis	e attendance		Yes	5.00	Coloquium exam		Yes	20.00				
Lecture	attendance	Coloquium exam		Yes	20.00							
	Literature											
Ord.	Author			Title	•	Publisher		Year				
1,	Emil Levi, Vladan Vučković, Vladimir Strezoski	Osnov	i Elektroener	getike		STYLOS, Novi Sad		2004				
2,	A. E. Fitzgerald, Charles Kingsly	Elektri	čne mašine			Naučna knjiga, Beo	grad	1962				

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



2006

prva verzija rukopisa skripte

Table 5.2 Course specification

Course:										
Course id:	E136		Introduction	to Microcomputer Electror	nics					
Number of ECTS:	7									
Teachers:	Malbaša D. Veljko, Mezei D. Ivan									
Course status:		Elective								
Number of active tead	ching classe	s (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	1		2 0 0							

Precondition courses

1. Educational goal:

Enabling students to design and simulate simple digital electronic systems using a chosen hardware description language (HDL). Enabling students to understand functional units, structure, operation principles and design of simple microcomputer systems.

2. Educational outcomes (acquired knowledge):

A student who successfully completes this course will be able:

- to design, simulate and implement simple combination and sequential networks on a programmable digital electronic circuit by using a chosen hardware description language (HDL).
- to design, write a source programme, test and run a programme in the symbolic machine language on a given microcomputer system
- to design a structure of a simple microcomputer system based on the given specifications
- to make a specification of a personal computer based on the given applications

3. Course content/structure:

Veljko Malbaša

Complex digital systems. Design and simulation of digital systems using the hardware description language (HDL). Structure and design of simple microprocessors and microcomputers. Programming in the symbolic machine language.

4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)												
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points				
Laborat	tory exercise attendance	Yes	5.00	Final exam - part one		Yes	25.00					
Laborat	tory exercise defence	Yes	40.00	Final exam - part two	Yes	25.00						
Lecture attendance Yes												
	Literature											
Ord	Author			Title	<u> </u>	Publishe	er	Year				

Uvod u digitalnu i mikroračunarsku elektroniku

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering

Mikroknjiga, ISBN: 86-7555-

Javno preduzeće PTT

saobraćaja "Srbija"

265-3

2005

1993



Table 5.2 Course specification

Course:											
Course id:	EK202		Communica	ation networks - introducti	on						
Number of ECTS:	7										
Teachers:		Bajić D. [jić D. Dragana, Lončar-Turukalo G. Tatjana								
Course status:		Elective									
Number of active tead	ching classe	es (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3	2	2 1 0									
Precondition courses			None								

1. Educational goal:

Basic knowledge related to the communication and computer networks. Connections in network surrounding. Students should acquire the basic function of network connections and layered function distribution.

2. Educational outcomes (acquired knowledge):

Students would acquire the basic principles of communication networks. It is intended to clarify the fundamental problems at network layers. The subject is organized as a sequel of engineering problems that should be solved at the various levels of communication link. An engineering compromise would be explained, as a solution that satisfy both the final user, and the requirements considering the available resources.

3. Course content/structure:

Introduction (plan, pre-exam, exam, literature); Network transmission fundamentals - message, packet, session, exchange; Classical networks, frame, synchronous transmission and transport systems. Computer networks, types; Layer structures - advantages and disadvantages. PHY level - medium, line codes. Modem. MATLAB example. Data link layer - error detection and ARQ procedures; MATLAB example. Multiple access. Collision-detection, random access, carrier sensing, tree, compromised algorithms. MATLAB example. Network layer and path finding. MATLAB example. QoS. Transport layer, session, presentation and application. Security problems. MATLAB example.

4. Teaching methods:

4.

5.

Endru S. Tanenbaum

Stanislav Matić

Lessons; practical work and laboratory work with matlab examples.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations		Mandatory	Points	Final exam Ma		Mandatory	Points				
Homew	rork		Yes	20.00	Written part of the exam	- tasks and theory	Yes	70.00				
Test			Yes	10.00				,				
		ature										
Ord.	Author			Title	;	Publisher		Year				
1,	A. Tanenbaum	Comp	uter Network	3		4th Edition, Prentice Hall		2003				
2,	Bertsekas, Galllager	Data N	Vetworks			2nd edition, Prentice Hall		1997				
3,	Predmetni nastavnici Skripte i prezentacije na sajtu Katedre							2012				

Računarskke mreže, prevod četvrtog izdanja

Principi komutacije u telekomunikacijama

(Tanenbaum)

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:											
Course id:	E130A		Electrical Measurements								
Number of ECTS:	7										
Teachers:		Pejić V. [jić V. Dragan, Župunski Ž. Ivan								
Course status:		Elective									
Number of active teac	hing classe	es (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3	()	4 0 0								
Precondition courses	urses None										

1. Educational goal:

Acquiring knowledge in the field of electrical measurements.

2. Educational outcomes (acquired knowledge):

Acquiring experience in the laboratory practice. Training in the field of measurement results processing. Mastering the principles of the measurement instruments operation. Studying the measuring methods.

3. Course content/structure:

Measuring instrument. Analog measuring instruments. An instrument with the movable coil. Extension of the instrument's measuring field with movable coil. An instrument with movable iron. Electrodynamics instrument. Extension of the measuring range of the voltmeter and ammeter. Electrical measuring instruments. Digital measuring instruments. Counter Time. Counting. Frequency measuring. Measuring the period. Measuring the phase difference. DA converters. Function generators. AD converters. Method of voltage compensation. Method of voltage conversion into frequency. Method of double slope. Sigma delta method. Oscilloscopes. Time base. Trigger time base. X-Y mode. Multichannel oscilloscopes. Digital oscilloscopes. Measuring transformers. Measuring voltage transformers. Current measuring transformers. Electricity meters. Induction meter of electricity. Electronic meter of electricity. Sampling timer. Measuring bridges. DC measuring bridges. Wheatstone bridge. Kelvin bridge. Alternating measuring bridges. Unbalanced measuring bridges with more sources. Measuring compensators. DC measuring compensators. Alternating measuring compensators. General characteristics of measuring instruments. Static property. Sensitivity. Linearity. Resolution. Measuring range. Scale/watch hand/ Display. Input/Output Impedance. Accuracy. Stability. Normal/Limiting/Referent conditions. Tags. Dynamic properties. Measuring of electrical quantities. Measuring nonelectrical quantities. Measuring insecurity. Measuring errors. Rough mistakes. Systematic mistakes. Random mistakes. Measuring uncertainty. Standard measuring uncertainty. Type "A". Type "B". Combined measuring uncertainty. Extended measuring uncertainty. Measuring information. Quality of the measuring information.

4. Teaching methods:

Lectures. Laboratory Practice. Consultations.

Laboratory exercise defence Yes 30.00 Written part of the exam - tasks and theory Yes 50 Oral part of the exam Yes 20 Literature Ord. Author Title Publisher Yes 190 1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti Nauka Beograd 1996												
Laboratory exercise defence Yes 30.00 Written part of the exam - tasks and theory Yes 50 Oral part of the exam Yes 20 Literature Ord. Author Title Publisher Yes 190 1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti	Knowledge evaluation (maximum 100 points)											
Oral part of the exam Yes 20 Literature Ord. Author Title Publisher Ye 1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti Nauka Beograd 1996		Pre-examination obligations		Mandatory	Final ex	kam	Mandatory	Points				
Literature Ord. Author Title Publisher Ye 1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti Nauka Beograd 1996	Laborat	tory exercise defence	- tasks and theory	Yes	50.00							
Ord. Author Title Publisher Ye 1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti Nauka Beograd 1996				Yes	20.00							
1, I. Bagarić Metrologija električnih veličina merenja i merni instrumenti Nauka Beograd 1996		Literature										
instrumenti instrumenti	Ord.	Author			Title	;	Publishe	r	Year			
2 Debort A Witte Electronic Test Instruments Theory and Applications DTD Prentice Hell 1003	1,	I. Bagarić			nih veličin	a merenja i merni	Nauka Beograd		1996			
2, Robert A. Witte Electronic Test instruments Theory and Applications FTR FTentice Hall 1993	2,	Robert A. Witte	Electro	onic Test Inst	ruments 1	heory and Applications	PTR Prentice Hall		1993			

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:			D : (T)								
Course id:	E137		Basics	of Telecommunications							
Number of ECTS:	6										
Teachers:		Crnojević	Crnojević S. Vladimir, Milošević S. Vladimir, Sečujski S. Milan								
Course status:	Elective										
Number of active tead	ching classe	es (weekly	r)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3		1 1 0 1									
Precondition courses			None								

1. Educational goal:

Mastering the basic knowledge related to the methods of analysis and transmission of analog and digital signals.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge on analog and digital telecommunications, practice in the laboratory and introduction to the practical communication systems.

3. Course content/structure:

Systematization of telecommunication signals. Analysis of analog signals. Transmission of signals through linear systems. Analog modulations. Impulse modulations. Selection, quantification and encoding of analog signals; IKM. Analysis of statistic properties of digital signals. Processing digital signals: scrambling, linear and non-linear in-line coding. Transmission of digital signal in a basic frequency range (noise, inter-symbol interference, the probability of error), digital modulation. Synchronization. An overview of modern communication systems.

4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points				
Laboratory exercise defence Yes 30.00 Written part of the e						- tasks and theory	Yes	70.00				
	Coloquium exam											
Literature												
Ord.	Author			Title	;	Publisher		Year				
1,	I. S. Stojanović	Osnov	i telekomunik	acija		Građevinska knjiga, Beograd		1977				
2,	Ž.Trpovski, V.Milošević, M.Temerinac	Osnov	i telekomunik	acija		Skripta, FTN, Novi S	Sad	2002				
3,	G. Lukatela, D. Drajić, G. Petrović, R. Petrović	Digital	ne telekomur	nikacije		Građevinska knjiga,	Beograd	1984				
4,	V. Milošević, V. Delić, M.Narandžić, Č. Stefanović	Digital	ne telekomur	nikacije - s	skripta	FTN u saradnji sa V Austria, Novi Sad	VUS	2005				
5,	V.Milošević, V.Delić	Digital	ne telekomur	nikacije		FTN, Novi Sad		1996				

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Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Table 5.2 Course specification

Course:			D. W. 101							
Course id:	EK314		Digital Signal Processing							
Number of ECTS:	7									
Teacher:		Sečujski	Sečujski S. Milan							
Course status:		Elective								
Number of active tead	ching classe	s (weekly	')							
Lectures:	Practical	classes: Other teaching types: Study research work: Other								
3	1		1 0 0							

Precondition courses

1. Educational goal:

As an introductory course in the series of course related to digital processing of certain types of signals, this course has an educational objective to offers students fundamental knowledge about digital processing and its application. The objective is to introduce students to digital signals and systems for their processing after they learned about analog signals. It is necessary to know digital signals in the frequency domain, digital filters and methods of their design.

2. Educational outcomes (acquired knowledge):

In the lectures students are introduced to the basic algorithms of the signal processing in the discrete time and to the most important transforms of discrete signals. The central part of the course is the Fourier transform. Digital filters are introduced through specific examples, and then the basic scientific methods for their design while using adequate software tools are learnt. Based on the gained knowledge, students are able to analyze the given problem, choose adequate class of digital filter and the design method, design and implement the digital filter. In the practice students gain practical experience with Matlab DSP Toolbox. They are able to evaluate and calculate basic parameters of the digital filter. They are able to identify and qualify potential problems in implementation of digital filters and to find the solution.

3. Course content/structure:

Practical aspects of A/D and D/A conversion and the sampling theorem. Transform of discrete signals and connections between them (ZT, FTD, DFT). Fast FT and fast convulsion. Examples of digital FIR and IIR filter and their characteristics. Basic methods of the digital filter design (while getting introduced to the Matlab DSP Toolbox).

4. Teaching methods:

The entire course of lectures (3 hours per week) is continually followed by synchronized auditory and computer practice (1 hour each). Lectures are carried out by the professor using the PowerPoint presentation available to the students in the .pdf format. Presentations with animations illustrate critical details in the lectures. In the auditory practice problems of spectral analysis of digital signals and the design of digital filters are solved. The entire course is followed by the Practice in the computer center of the Faculty of Technical Sciences, where students gain practical experience working with software tools for digital signal processing. Practice preparation and Homework Assignments are done through the Web portal of the Department using the specially designed on-line exercises. Acquired theoretical knowledge is tested during the semester in the form of tests (colloquiums), while the practical work is verified through short project and homework assignments. Those are all e

			Knowledge 6	evaluation	(maximum 100 points)			
	Pre-examination obligations		Mandatory	Points	Final ex	Final exam		
Test	Test Yes 10.00				Written part of the exam	- tasks and theory	Yes	70.00
Test	Test Yes 10.00				Coloquium exam		No	20.00
Test								
Ord.	Author			Title	;	Publishe	er	Year
1,	Milan Sečujski, Vlado Delić, Nikša Jakovljević, Igor Radić	"Zbirka	a zadataka iz	digitalne	obrade signala"	FTN, Novi Sad		2007
2,	Ljiljana Milić i D. Dobrosavljević	"Uvod	u digitalnu ol	bradu sigr	nala"	ETF, Beograd		1995
3,	Vlado Delić i dr.		ortala Katedr		nja i on-line vežbe preko comunikacije i obradu			2007

ACSTRAS STUDIO

UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Table 5.2 Course specification

Course:	Introduction to Digital and Microcomputer Floatronics							
Course id:	E136d		Introduction to Digital and Microcomputer Electronics					
Number of ECTS:	7							
Teacher:		Malbaša	D. Veljko					
Course status:		Elective						
Number of active tead	ching classe	s (weekly	')					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	1		2	0	0			

Precondition courses

1. Educational goal:

The course objective is to enable students to design and simulate simple digital electronic systems and functional units of microprocessors and understanding of structure, operation principle, specifications and design of simple microcomputer systems.

2. Educational outcomes (acquired knowledge):

A student who successfully completes this course will be able:

- to design and simulate simple combination and sequential networks
- to design, write a source program, test and run the program in the symbolic machine language on a given microcomputer system
- to design a structure of a simple microcomputer system based on the given specifications
- to make a specification of a personal computer based on the given applications

3. Course content/structure:

Boolean algebra. Numerical systems. Logic circuits. Standard combinational logic networks: a comparator, multiplexer, demux, encoder, decoder, adder. Standard sequential logic networks: flip-flops, memories, counters, registers. Complex digital systems. The structure of the simple microprocessors and microcomputers. Programming in the symbolic machine language.

4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final ex	kam	Mandatory	Points			
Laboratory exercise attendance	Yes	5.00	Final exam - part one		Yes	25.00			
Laboratory exercise defence	Yes	40.00	Final exam - part two		Yes	25.00			
Lecture attendance	Yes	5.00							
Literature									
						```			

		Literature		
Ord.	Author	Title	Publisher	Year
1,	V. Malbaša	Uvod u digitalnu i mikroračunarsku elektroniku	Prva verzija rukopisa skripte	2005
				•

# ASTUDIO POR STUDIO POR

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# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Measuring in Flectronics						
Course id:	E140		Mea	suring in Electronics					
Number of ECTS:	4								
Teacher:		Župunski	Ž. Ivan						
Course status:		Elective	ctive						
Number of active teac	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	C	)	2	0	0				
Precondition courses			None						

#### 1. Educational goal:

Acquiring knowledge in the field of electrical measuring.

2. Educational outcomes (acquired knowledge):

Acquiring experience in the laboratory practice. Training in the field of measuring results processing. Mastering the operation principles of the measuring instruments. Studying the measurement methods.

#### 3. Course content/structure:

Measuring instruments. Analog measuring instruments: An instrument with a moving coil. Extending the measuring instrument range by the moving coil. An instrument with a movable iron. Electrodynamic instrument. Extending the voltmeter and ampere meter measuring range. Electronic measuring instruments. Digital measuring instruments: Counting, Measuring frequency, Measuring time, Measuring the phase shift. Counter Timer. DA converters. Function generators. AD converters. The method of voltage compensation, the method of converting voltage to frequency, the method of double slope, Sigma-Delta method. Digital multimeters. Oscilloscopes: Time base, Trigger time base, XY mode. Multi-channel oscilloscopes. Digital oscilloscopes. Measuring bridges: DC measuring bridges. Wheatstone bridge, Kelvin bridge. AC measuring bridge. Unbalanced measuring bridges. Measuring bridges with multiple sources. Measuring compensators: DC measuring compensators. Alternating measuring compensators. Measurement of electrical quantities. Measuring the resistance/impedance, Inductance measurement/mutual inductance, Measuring capacitance, Measuring electric power. Measurement uncertainty. Measurement error: a rough mistake, systematic error, random errors. Measurement uncertainty: The standard measurement uncertainty, Type "A", Type "B". Combined measurement uncertainty, Expanded measurement uncertainty.

# 4. Teaching methods:

Lectures. Laboratory Practice. Consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations Mandatory Poi			Points	Final ex	kam	Mandatory	Points	
Laborat	Laboratory exercise defence Yes			30.00	Written part of the exam	- tasks and theory	Yes	40.00	
	Oral part of the exam						Yes	30.00	
				Liter	ature				
Ord.	Author		Title			Publishe	er	Year	
1,	V. Bego	Mjerer	nja u elektrote	hnici		Tehnička knjiga, Za	greb	1999	

# TO STUDIO

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:									
Course id:	EJ04L		English Language – Upper Intermediate						
Number of ECTS:	2								
Teachers:			ogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafranj Jelisaveta						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	·)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	(	)	0	0	0				
Dan a san diti a san a san a san									

#### Precondition courses

# 1. Educational goal:

Further improvement of language skills. Developing strategies for better understanding of the written text and skills of written expression. Recognition and use of the formal and informal style of communication, as well as other forms of written expression. Developing presentation skills, expressing agreement and disagreement. Expanding vocabulary and adopting structures with gerunds and infinitives and indirect speech.

#### 2. Educational outcomes (acquired knowledge):

Students are able to read more complex texts using helpful reading strategies. They are able to express themselves in the written form using adequate style. They are able to orally present their ideas and express their agreement or disagreement with someone else's ideas with some extent of certainty.

#### 3. Course content/structure:

Strategies for understanding texts in the foreign language. The use of text organizer. The use of the formal and informal style and the choice of adequate register. Expanding the vocabulary related to the topics such as education, work, new technologies and discoveries, life in the future etc. Indirect speech. The use of gerund and infinitive.

#### 4. Teaching methods:

The emphasis is placed on the student activities during class, their interactions with the teacher and between themselves. The communicative method is used in the foreign language lectures.

	ggg									
	Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	Final ex	kam	Mandatory	Points		
Test			Yes	10.00	Written part of the exam	- tasks and theory	Yes	70.00		
Test			Yes	10.00						
Test Yes			10.00							
	Literature									
Ord	Author		<u> </u>	Title		Dublishs		Voor		

Ord.	Author	Title	Publisher	Year
1,	Michael Vince	Intermediate English Practice	Macmillan, London	2000
2,	M. Harris, D. Mower, A. Sikorzynska	Opportunities Intermediate	Longman, London	2005
3,	Grupa autora	Oxford English - Serbian Dictionary	Oxford University Press, Oxford	2006
4,	John and Liz Soars	New English Headway Intermediate (odabrana poglavlja)	OUP	2000

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# Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering

FTN Novi Sad

FTN Novi Sad

Cambridge University Press

2005

2005

2007



# Table 5.2 Course specification

Course:		Customs and Cianals						
Course id:	e141		Systems and Signals					
Number of ECTS:	4							
Teacher:		Novak O	ovak O. Ladislav					
Course status:		Elective						
Number of active tea	ching classe	es (weekly	<b>'</b> )					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	•	1	1 0 0					

#### Precondition courses

### 1. Educational goal:

Providing a general overview of fundamental aspects of the theory of signals and systems including algorithms for the analysis of linear time invariant systems in the time and complex domain.

# 2. Educational outcomes (acquired knowledge):

A student who successfully completes this course will gain an insight of the basic concepts of the theory of signals and systems in continuous time which includes:

- manipulation with regular and singular signals with continuous time
- understanding the general description of the system, and their classification and qualitative properties

Sistemi i signali - skripta

- an overview of algorithms for the analysis of linear time invariant systems in the time and complex domain and the concept of analog filtering.

#### 3. Course content/structure:

Fundamental aspects of the theory of signals, the concept of time axis and the concept of signals. Singular and regular signals with continuous time and operations with them. Bilateral Laplace transformation, Unilateral Laplace transformation, Fourier transformation. Fundamental aspects of the systems theory, a description of terminal behavior of the system elements, their classification and connection. Linear time-invariant systems: an analysis in the time domain and stability. Analysis of linear time-invariant systems using unilateral Laplace transformation and Fourier transformation. The concept of filtering, introduction to classification and filter synthesis.

### 4. Teaching methods:

L. Novak

S. Dautović, R. Struharik

Mrinal Mandal, Amir Asif

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations		Mandatory	Points	Final exam		Mandatory	Points		
Computer exercise attendance		Yes	5.00	Vritten part of the exam - tasks and theory Yes		Yes	50.00		
Lecture	Lecture attendance			5.00	Coloquium exam				
Test			Yes	20.00					
	Literature								
Ord.	Author		Title			Publishe	er	Year	

Laboratorijske vežbe iz signala i sistema - skripta

Continuous and Discrete Time Signals and Systems

# STAS STUDIO

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:										
Course id:	E145		Operations Research							
Number of ECTS:	7									
Teacher:		Pantović	tović B. Jovanka							
Course status:		Elective	Elective							
Number of active tea	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	;	3	0	0	0					
Precondition courses			None							

### 1. Educational goal:

The main objective is to develop the ability for setting the mathematics models of realistic problems, introduction to some methods of their solving and introduction to the possibilities of their application in engineering problems.

#### 2. Educational outcomes (acquired knowledge):

Theoretical knowledge in the field of the stated course contents. Skills in setting the mathematics models and knowledge of algorithms for their solving.

# 3. Course content/structure:

Linear programming. Simplex algorithm. Simplex algorithm efficiency. The theory of duality. Sensitivity analysis to parameter change. Integer programming. "Branch and bound" method. Networks. Covering trees. Problems of network traffic. Application: transportation problem, the problem of the shortest path in the network, the problem of maximum flow. Game theory. Matrix games. Topics of student's choice.

#### 4. Teaching methods:

In the lectures theoretical part of the course is followed by typical examples in order to better understand the matter taught. In the practice, which accompanies lectures, typical problems are solved and the knowledge taught in lectures is deepened. Besides lectures and practice, consultations are held on a regular basis. The knowledge testing is written and oral through the term paper, 3 colloquiums, written and oral part of the examination. Course grade is formed based on the success in the term paper, colloquium, written and oral part of the examination.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Homework	Yes	5.00	Theoretical part of the exam	Yes	10.00				
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	20.00				
Term paper	Yes	20.00		,					
Test	Yes	10.00							
Test	Yes	10.00							
Test	Yes	10.00							
Test	Yes	10.00							

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Robert Vanderbei	Linear Programming: Foundations and Extensions	Princeton University, USA	2006						
2,	Petrić, J., Kojić, Z., Šarenac, L.,	Zbirka zadataka iz operacionih istraživanja	Nauka, Beograd	2003						
3,	Jovan Petrić	Operaciona istraživanja	Naučna knjiga, Beograd	1987						

# THE STUDIO

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# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:										
Course id:	SE0008		Algorithms and Data structures							
Number of ECTS:	8									
Teacher:		Milanovid	ilanović N. Nikola							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3		0	2	0	1					
Precondition courses			None							

#### 1. Educational goal:

Introduce students to concepts of in-memory data structures and their use in program development.

#### 2. Educational outcomes (acquired knowledge):

Upon successful course completion, student is familiar with abstract data types and capable of handling linear data structures - arrays, sets, maps, lists, stacks, queues; Student is also familiar with basic concepts of program efficiency analysis; Student is capable of using search and sort methods on data structures; Student understands the concept of recursiond and its use in program development; Student understands and use hash tables as well as tree structures.

#### 3. Course content/structure:

Abstract data types: concept of abstract data type; new type definition. Arrays: concept of an array, operations on arrays, efficency analysis for operations on arrays, matrix, operations on matrices. Sets and maps: concept od data set, set impelementation, concept of map, map implementation, multidimensional arrays and operations on them. Algorvišedimenzionalni nizovi i operacije nad njima. Algorithm analysis: O notation, Pzthon list analysis. Searching and sorting: lienar and binary search, sorting alhorithms, operations on sorted arrays. List, stack and queue: linked lists, use of linked lists, operations on linked lists; double linked lists; stack - concept and operations; queue - concept and operation. Stack and Queue implementation; Multiple-linked lists. Recursion - concept and features. recursion implementation and usage. Hash tables: hash functions, hash tables - concept and operations, hash usage. Trees: binary trees - concept and operation; N-Trees; Search trees.

#### 4. Teaching methods:

Lectures, Computer exercises; Consultations. The exam is oral. Assessment and final marks are based on the success of the laboratory exercises and an oral exam.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations Mandatory Points Final exam Mandatory Points								
Project defence			Yes	50.00	Theoretical part of the ex	am	Yes	50.00	
	Literature								
Ord.	Ord. Author Title Publisher					er	Year		
1,	R.D. Necaise	Data S	Data Structures and Algorithms Using Python Wiley					2010	
1,	1, R.D. Necaise Data Structures and Algorithms Using Python Wiley						201		

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# Study Programme Accreditation

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Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:				D					
Course id:	BMI127		Biomechanics						
Number of ECTS:	8								
Teachers:		Spasić T	pasić T. Dragan, Maretić B. Ratko, Zuković M. Miodrag, Grahovac M. Nenad						
Course status: Elective									
Number of active tead	hing classe	s (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
4	2	2	0 0		2				
Precondition courses			None						

### 1. Educational goal:

Professor's intention is to teach the student the following through this course: - to understand biomechanics as development, generalization an application of mechanics in the analysis of biosystems, for understanding physiological state and improvement of diagnoses and treatment of both injuries and illness. Biosystems are more complex in both function and form then technical systems.

#### 2. Educational outcomes (acquired knowledge):

After this course student should be able: to connect knowledge acquired in course of Mechanics with nonuniform, descriptive biological material and to formulate a model for quantitative analysis of biomechanical systems to solve obtained equations and to understand the influence of aging, disease and trauma on mechanical function of systems in human body comparing to mechanical functions of the systems in physiological state for better choice of necessary intervention.

#### 3. Course content/structure:

External forces and their influence o then human body and its motion. Motion of multibody system with visco-elastic elements. Mathematical models in biomechanics. Terminology, structure and functions of skeletal, muscular and nervous system. Internal forces in human body and their influence on a body and its motion. Rheological properties of tissues and tissues for restoration. Relations between stress and strain. Laws of motion and energy balance. Biomechanics of bones, joints and ligaments. Types and structure of muscles as movement initiator. Muscle contraction force. Nervous system as a steering part of musculoskeletal system. Axioms of termomechanics. Metabolism: energy, heat, work and power of the human body. Specifics of mathematical modelling and numerical simulations of the motion of the human body: dynamical modelling of a joints in the human body with special attention to the head-neck connection, models for analysis of impact, with special attention to biomechanical response of a human bodyand head during frontal impact. Application of mathematical theory of elastic rods in biomechanics. Application of biomechanicsl models in rehabilitation, exercises and sport. Usage of prosthetic devices for mechanical functions of the human body. Oscillations of biosystems.

### 4. Teaching methods:

Lectures, auditory practice, computational practice. Homework, as a method for checking of understanding and usage of terms and developed methods.

·									
Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Exercise attendance	Yes	5.00	Oral part of the exam	Yes	30.00				
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	40.00				
Homework	Yes	5.00		-					
Homework	Yes	5.00							
Homework	Yes	5.00							
Lecture attendance	Yes	5.00							

#### Literature Ord. Author Title Publisher Year Aydın Tözeren 2000 1, Human body dynamics Springer 2, Peter McGinnis Biomechanics of sport and exercise **Human Kinetics** 2005 Yuan-Cheng Fung 1993 3, Biomechanics Springer 4, Irving Herman Physics of human body 2007 Springer J. Wilmore, D. Costill & L. 5. Physiology of sport and exercise **Human Kinetics** 2008

# TAS STUDIO

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# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



# Table 5.2 Course specification

Course:			_, ,						
Course id:	EE300	]	Electromagnetics						
Number of ECTS:	7								
Teachers:		Đurić M.	Đurić M. Nikola, Juhas T. Anamarija, Prša A. Miroslav						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	;	3	0	0	0				
Precondition courses	3		None						

### 1. Educational goal:

The course objective is that students learn basic things about theoretical and practical properties of the electromagnetic fields, methods of their determination and the fields of their application.

#### 2. Educational outcomes (acquired knowledge):

Acquired knowledge will be used in further education, in general and professional courses which follow, as well as for the specific problem solving.

#### 3. Course content/structure:

General concepts about electromagnetic field – Maxwell equations, potentials of electromagnetic field, some general theorems of electromagnetic field: superposition theorem, energy distribution theorem, Poynting theorem, equivalence theorem. Electrostatic field – conductors and dielectrics in electrostatic field, methods for solving electrostatic field. Electric field of time constant currents – Duality of time constant current field with electrostatic field, theorem on characters – shoulder straps, basic concepts on relaxation and diffusion currents. Time constant magnetic field – Duality of time constant magnetic field with electrostatic field, force and torque on the current distribution in the foreign magnetic field, methods for solving the time constant magnetic field. Slow time variable electromagnetic field – definition of the slow time variable electromagnetic field, electromagnetic induction and examples of its application, mutual and self, internal and external inductance, energy and force of static and quasistatic magnetic field, skin effect and proximity effect.

# 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points	
Test			Yes	10.00	Coloquium exam		No	20.00	
Test			Yes	10.00	Coloquium exam		No	20.00	
Test			Yes	10.00	Theoretical part of the ex	am	Yes	30.00	
	Practical part of the exam - tasks							40.00	
				Liter	ature				
Ord.	Author			Title	•	Publishe	er	Year	
1,	Branko D. Popović	Elektromagnetika Beograd			Beograd		1998		
2,	Anamarija Juhas	Zbirka	Zbirka zadataka iz elektromagnetike FTN Izdavaštvo				2008		

# ASSTUDIO DE LA CONTRACTOR DE LA CONTRACT

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UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:									
Course id:	EK320		Principles of digital communications						
Number of ECTS:	5								
Teachers:		Milošević S. Vladimir, Stefanović D. Čedomir							
Course status:		Elective							
Number of active tea	ching classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2 1			1	0	2				

#### Precondition courses

# 1. Educational goal:

Providing students with the knowledge of the basic aspects of digital signal analysis and digital transmission.

2. Educational outcomes (acquired knowledge):

Theoretical background on digital communications and practical digital transmission systems, ability to use software simulation tools (Matlab) and hands-on experience on DSP platform.

3. Course content/structure:

Statistical analysis of digital signals. Digital signal processing – scrambling and (liner and nonlinear) line coding. Baseband transmission – impacts of noise and inter-symbol interference, probability of error. Nyquist criteria, equalization, optimal receiver. Symbol synchronization.

# 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points	
Homew	ork		Yes	10.00	Written part of the exam	- tasks and theory	Yes	70.00	
Laborat	tory exercise defence		Yes	20.00	Coloquium exam		No	35.00	
Literature									
Ord.	Author		Title			Publishe	r	Year	
1,	I. S. Stojanović	Osnov	i telekomunik	acija		Građevinska knjiga, Beograd		1977	
2,	V. Milošević, V. Delić	Digital	ne telekomur	nikacije - 2	Zbirka zadataka	Edicija Tehničke kn Stylos, Novi Sad	ige, FTN i	1996	
3,	B. Sklar	Digital	Digital Communications			Prentice Hall, New Jersey		1988	
4,	V.Milošević, V.Delić, M.Narandžić, Č.Stefanović	Digital	Digitalne telekomunikacije			WUS Austria i FTN		2005	

# LAST STUDIO

# UNIVERSITY OF NOVI SAD

# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:										
Course id:	EE303		Analysis of PES 1							
Number of ECTS:	6									
Teacher:		Strezosk	rezoski C. Vladimir							
Course status:		Elective								
Number of active teac	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	1	l	0	0	0					
Precondition courses			None							

# 1. Educational goal:

The nature of the three-phase power electrical systems. Mathematical modeling of balanced elements of power electrical systems.

2. Educational outcomes (acquired knowledge):

Modeling and calculation of the power electrical system elements.

### 3. Course content/structure:

Mathematical Basis. Fundamentals of power electrical systems: basic laws and theorems, symmetrical components and the system of relative values. Element models of power electrical systems: consumers, alternating machines, transformers, cables, capacitors, conductors.

# 4. Teaching methods:

Lectures; Auditory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory									
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00				
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	30.00				
Test	Yes	10.00		•					
Test	Yes	10.00							
Test	Yes	10.00							
	Literature								

	Literature								
Ord	Ord. Author Title Publisher Year								
1	, V.C.Strezoski	Analiza elektroenergetskih sistema	FTN	2007					

# RESTRAS STUDIO

# UNIVERSITY OF NOVI SAD

# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Electronic measurements						
Course id:	EIEMER								
Number of ECTS:	6								
Teachers:		Milovančev S. Slobodan, Pejić V. Dragan, Vujičić V. Vladimir							
Course status:		Elective							
Number of active teac	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	C	)	2	0	1				
Precondition courses			None						

### 1. Educational goal:

Enabling students to design and use electronic measuring instruments.

2. Educational outcomes (acquired knowledge):

Ability to design electronic measuring instruments. Ability to develop measuring methods for the application in electronic measurements.

#### 3. Course content/structure:

Elements of analog electronic instruments: operational and instrumental amplifiers, analog filters, analog correlators, modulators and demodulators. Measuring methods. Measuring in the time and frequency domain. Oscilloscopes. Spectrum analyzers. Sources of measuring signals. Power supply of electronic instruments. Measuring at high frequencies. Noise measurement. Eliminating the impact of interference in measurement. Elements of digital electronic instruments: D/A and A/D converters, digital filters, digital correlators, DFT processors, E-metering integrated circuits. Digital measuring methods. Digital instruments for frequency and time measurement. Digital multimeters. Digital oscilloscopes. Spectrum analyzers. Logic state analyzers. Waveform synthesizers. Stochastic measurements. Eliminating the impact of interference in measurement.

#### 4. Teaching methods:

Lectures. Laboratory Practice.

	Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points						Final exam		Points		
Laboratory exercise defence Yes 50.00 Written part of the exam						- tasks and theory	Yes	30.00		
Oral part of the exam Yes										
	Literature									
Ord.	Author			Title	;	Publisher		Year		
1,	Susan Fox ed.	Measu Handb	,	umentatio	on, and Sensors	CRC Press LLC		1999		
2,	Alan S. Morris	Measu	rement & Ins	trumentat	tion Principles	Butterworth-Heinemann, Oxford		2001		
3,	Walt Kester		Practical Design Techniques for Sensor Signal Conditioning Analog Devices							

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# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Introduction to Information Theory						
Course id:	EK310								
Number of ECTS:	5								
Teachers:	ners: Šenk I. Vojin, Trpovski V. Željen								
Course status:		Elective							
Number of active tead	ching classe	es (weekly	')						
Lectures:	Practical	classes: Other teaching types:		Study research work:	Other classes:				
2	1	1 1 0 1							

#### Precondition courses

# 1. Educational goal:

Introduction to the basics of the information theory and an overview of algorithms used in information processing.

2. Educational outcomes (acquired knowledge):

The knowledge of basic postulates of the information theory.

- 3. Course content/structure:
- Introduction to information theory;
- Source coding (statistical coding), block code for data compression, optimal prefix code (Huffman code), Arithmetic coding, Universal codes, Lempel-Ziv algorithms;
- Protective coding (Model of the communication channel, Trans information, Equivocation, Irrelevance, Channel capacity and the methods of calculation, Optimal decoding. MAP criterion, The properties of binary symmetric channel, Convolutional codes and algorithms for their decoding)

#### 4. Teaching methods:

Lectures and Practice.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam Mandato		Mandatory	Points	
Exercise	e attendance		Yes	5.00	Oral part of the exam		Yes	50.00	
Homework Ye			Yes	5.00	Practical part of the exam - tasks Yes		20.00		
Laborat	ory exercise attendance		Yes	5.00	.00				
Lecture attendance			Yes	5.00					
Test			Yes	10.00					
				Liter	ature				
Ord.	Author		Title			Publisher		Year	
1,	Vojin Šenk	Uvod u teoriju informacija				FTN, Novi Sad		2007	
						-	•		

# STAS STUDIO

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# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:		_, ,, ,, ,,							
Course id:	EE304		Electric Machines 1						
Number of ECTS:	5								
Teacher:		Vasić V.	Vasić V. Veran						
Course status:		Elective							
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	2	2	0	0	0				
Precondition courses			None						

### 1. Educational goal:

Acquiring basic knowledge in the field of electromechanical conversion of energy, electric machines, power electronic devices and electric drives.

- 2. Educational outcomes (acquired knowledge):
- understanding the basic principles of electromechanical conversion of energy
- -understanding the basic properties and modes of rotary machines

# 3. Course content/structure:

Rotary electric machines, classification and characteristics. Magnetic excitation forces, flux, inductance, threaded factors, induced electromotive force. Electromagnetic torque. The windings of electric machines. Losses and heating. Transformers (magnetic circuit, windings, operation principle, equivalent circuit, voltage drop, three-phase loop transformers, parallel operation of three-phase transformers, control transformers, auto-transformers).

#### 4. Teaching methods:

The course includes lectures and practice. In the lectures, contemporary illustrations for intuitive understanding of the lectured matter are used. In order to fully master the matter, in the auditory practice students solve problems which follow lectures and enable students to independently solve problems from the engineering practice. Part of the practice is carried out in the laboratory.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points	
Exercise	e attendance		Yes	5.00	Written part of the exam	tasks and theory	Yes	30.00	
Lecture	attendance		Yes	5.00	Coloquium exam		Yes	20.00	
Test			Yes	20.00	Coloquium exam		Yes	20.00	
				Liter	ature				
Ord.	Author			Title	;	Publishe	er	Year	
1,	B. Jurković, Z. Smolčić:	Kolekt	orski strojevi			Školska knjiga		1986	
2,	Z. Sirotić, Z. Maljković	Sinkro	ni strojevi			FER		1996	
3,	A. Dolenc	Sinhro	ni strojevi			Sveučilište Zagreb		1982	
4,	P. C. Sen	Princip	oles of Electri	c Machine	es and Power Electronics	JOHN WILEY & SONS		1997	
5,	J. J. Cathy	Electri Matlab		Analysis a	and Design Applying	McGRAW-HILL BO COMPANY	OK	2001	
6,	S. J. Chapman	Chapn	Chapman: Electric Machinery Fundamentals			McGRAW-HILL BO COMPANY	OK	1999	
7,	Đ. Kalić, R. Radosavljević	Transf	Transformatori			Zavod za udžbenike sredstva	e i nastavna	2001	
8,	R. Wolf	Uvod i	u teoriju elekt	ričnih stro	ojeva	Školska knjiga Zagr	eb	1975	

# LAS STUDIO LA ST

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# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			0 5						
Course id:	El303		Cognitive Processes for Engineers						
Number of ECTS:	4								
Teacher: Zdravković T. Sunčica									
Course status:		Elective							
Number of active tead	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	(	)	1	0	1				
Precondition courses			None						

# 1. Educational goal:

Acquiring basic knowledge in the field of cognitive processes.

2. Educational outcomes (acquired knowledge):

Introduction to cognitive processes. Ability to carry out experiments.

3. Course content/structure:

Perception, senses, early processes of cognitive processing, operating memory, long term memory, integrative functions, experiment, attention, language, memory, practical models.

4. Teaching methods:

Lectures; Laboratory Practice.

			Knowledge e	valuation	(maximum 100 points)				
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points	
Project	Project			30.00	Written part of the exam	- tasks and theory	Yes	70.00	
	Literature								
Ord.	Author			Title	)	Publisher		Year	
1,	P. Ognjenović	Psihol	ogija opažanj	а		Zavod za udžbenike sredstva Beograd	i nastavna	1990	
2,	2, A. Kostić Kognitivna obrada informacija Zavod za udžbenike i nastav sredstva Beograd						i nastavna	2006	

# TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



# Table 5.2 Course specification

Course:								
Course id:	EK411		Digital Filters					
Number of ECTS:	5							
Teachers:		Delić D. Vlado, Sečujski S. Milan						
Course status:		Elective						
Number of active tea	ching classe	es (weekly	r)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	•	1 1 0						

#### Precondition courses

#### 1. Educational goal:

After gaining fundamental knowledge about digital signal processing in the course of the same name, this course objective is to extend and deepen the knowledge of students through introduction to the more advanced algorithms and applications of digital signal processing. The goal is to get introduced to the designing methods of optimal filters and adaptive systems which are increasingly used in the practice.

# 2. Educational outcomes (acquired knowledge):

Students get introduced to the theoretical limits and designing methods of optimal digital filters and adaptive systems in the lectures. They will learn to choose optimal structures for the realization and to design complex systems for digital signal processing. The will know estimation methods of the signal spectrum. Greater emphasis of this course is on the Practice in the Laboratory for digital signal processing at the Faculty of Technical Sciences, where students will learn to use specialized software for digital filter design.

#### 3. Course content/structure:

Methods of design and selection of structure for the realization of optimal digital FIR and IIR filters. Multi-rate systems. Adaptive systems. Spectrum estimation (while being introduced to the Matlab Simulink)

#### 4. Teaching methods:

The whole course of lectures (2 hours per week) is continually followed by the synchronized auditory (1 hour) and computer practice (2 hours per week). Lectures are held by the professor using the PowerPoint presentations available to the students in the .pdf format. Presentations with animations illustrate critical details from the lectures. Problems are solved in the auditory practice. The whole course is followed by the Laboratory practice for digital signal processing at the Faculty of Technical Sciences, where students gain practical experience working on the software tools for digital signal processing. Practice preparation and preparation of homework assignments is done through the Web portal of the Department using specially designed on-line exercises. Part of the acquired theoretical knowledge is tested during the semester in the form of test (colloquiums), while practical work is verified through doing and defending short project and homework assignments. Those are all examin

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Test		Yes	10.00	Written part of the exam - tasks and theory	Yes	70.00			
Test		Yes	10.00	Coloquium exam	No	20.00			
Test		Yes	10.00						

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Milan Sečujski, Vlado Delić, Nikša Jakovljević, Igor Radić	"Zbirka zadataka iz digitalne obrade signala"	FTN, Novi Sad	2007						
2,	Ljiljana Milić, Zoran Dobrosavljević	"Uvod u digitalnu obradu signala"	Nauka, Beograd	1995						
3,	Milan Sečujski, Nikša Jakovljević	"Prezentacije sa predavanja i on-line vežbe preko web portala Katedre za telekomunikacije i obradu signala"		2010						

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Microprocessor Electronics						
Course id:	EM300A								
Number of ECTS:	6								
Teachers:		Malbaša D. Veljko, Mezei D. Ivan							
Course status:	us: Elective								
Number of active tead	ching classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	)	2	0	1				
Precondition courses			None						

### 1. Educational goal:

Enabling students to make models, modular designs, simulate and implement hardware functional units and microcomputer systems based on the microprocessors and microcontrollers. Enabling students to design, write and test application and system programmes in the symbolic machine language and programme language at high level for the microcomputer system design.

# 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will be able:

- to design, simulate and implement hardware functional units of the microcomputer system based on the given specifications.
- to design, simulate and implement hardware microcomputer system for general purposes based on the microprocessors and microcontrollers according to the given specifications.
- to model, design, simulate and implement simple application and system programmes in the symbolic machine language and programme language at the high level for the given microcomputer system.
- to test microcomputer system in the developing system based on the programmable circuits of the FPGA type.

# 3. Course content/structure:

Structure of the microcomputer systems for general purposes. Structure and features of the embedded microcomputer systems. Functional units of the microcomputer systems. Hardware functional unit design. Design of the microcomputer systems based on the microprocessors and microcontrollers. Application of software tools in design and simulation of microcomputer systems. Structure of the programme support of the embedded microcomputer systems. Design, writing and testing of application and system programmes. Application of programme languages at the high level and software tools in the programme support design of microcomputer systems. Introduction to microcomputer systems for real time operation.

# 4. Teaching methods:

Lectures; Computer Practice; Laboratory Practice; Consultation.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points	
Laboratory exercise attendance			Yes	5.00	Final exam - part one		Yes	25.00	
Laboratory exercise defence			Yes	40.00	Final exam - part two		Yes	25.00	
Lecture attendance			Yes	5.00					
				Liter	ature				
Ord.	Author		Title Publishe			r	Year		
1,	Veljko Malbaša	Mikrop	Mikroprocesorska elektronika - skripta Fakultet tehničkih na Sad			auka, Novi	2002		

# NO DE STUDIO

# UNIVERSITY OF NOVI SAD

# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Operating Systems and Competitive Programming				
Course id:	EE301						
Number of ECTS:	7						
Teachers:		Hajdukov	vić P. Miroslav, Suvajdžin Raki	ić B. Zorica			
Course status:		Elective					
Number of active tead	ching classe	es (weekly	')				
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:		
3	C	)	3	0	0		

#### Precondition courses

### 1. Educational goal:

The main course objective is mastering the principles of operation and structure of the operating system, as well as adopting the basics of competitive programming.

2. Educational outcomes (acquired knowledge):

Ability to use operating system on a user and system level and mastering the basic principles of concurrent programming.

# 3. Course content/structure:

Concepts and principles of operating systems. Concurrent nature of the operating system. Concurrent libraries. Cooperation and synchronization of processes/threads. Structure of the operating system. Distributed operating systems.

#### 4. Teaching methods:

Lectures. Computer Practice. Consultations. Among the examination prerequisites students take four tests and one course project. The theoretical part of the course is being tested through the final examination. The number of required points for the signature is 30.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Project	Yes	30.00	Theoretical part of the exam	Yes	30.00				
Test	Yes	10.00							
Test	Yes	10.00							
Test	Yes	10.00							
Test	Yes	10.00							

ı	Literature							
	Ord.	Author	Title	Publisher	Year			
	1,	M. Hajduković	Operativni sistemi – problemi i struktura	FTN izdavaštvo	2013			

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#### UNIVERSITY OF NOVI SAD

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# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



# Table 5.2 Course specification

Course:									
Course id:	EE305		Power Electronics 1						
Number of ECTS:	5								
Teachers:		Čelanovi	Čelanović L. Nikola, Grabić U. Stevan, Gušavac J. Strahil, Katić A. Vladimir						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2		1	1 0						
Precondition courses			None						

### 1. Educational goal:

Power Electronics 1 course objective is to enable the student to design and apply devices for converting parameters of electrical energy using the powerful electronic switching components and methods of digital control, that is, in addition to the theoretical studying of strong semiconductors and modes of all kinds of converters (AC/DC, DC/DC, DC/AC and AC/DC), students acquire the necessary practical experience to apply the acquired knowledge in the economy.

#### 2. Educational outcomes (acquired knowledge):

After mastering the course Power Electronics 1, students will be able to understand the principles and operation methods of power electronic conversions with strong semiconductor components, to solve and calculate simple solutions of power converters, as well as to apply commercial industrial power converters to electromotive drives and similar applications. They will be able to calculate methods of protection of these devices, as well as to predict their negative impact on network and fed consumers.

#### 3. Course content/structure:

Subject and the importance of the power electronics. Introduction to power converters. Components of power electronics. Structure and the operation principles. Safe operation field. Calculation of losses. Adjusters (AC/DC). Inverters (DC/AC). Alternating power suppliers (AC/AC). Power converters and the power quality. Converters for compensation and improvement of the power quality. Excitation circuit for switching components. Methods of control and regulation of power converters. Application examples of the power electronic devices.

# 4. Teaching methods:

Lecturing theoretical operational principles of strong electronic components and power electronic converters, Auditory Practice where problems of calculation of the power converters and their protective circuits are solved, Laboratory Practice where students gain practical proof of the theoretical knowledge and gain necessary practical experience and confidence using modular approach and independent work.

Knowledge evaluation (maximum 100 points)							
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points		
Laboratory exercise attendance	Yes	5.00	Practical part of the exam - tasks	Yes	50.00		
Laboratory exercise defence	Yes	20.00		•			
Lecture attendance	Yes	5.00					
Test	Yes	10.00					
Test	Yes	10.00					
	•						

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	Branko Dokić	Energetska elektronika: pretvarači i regulatori	Elektrotehnički fakultet i Banjaluka Company, Banja Luka	2000				
2,	Vladimir Katić	Energetska elektronika: Zbirka rešenih zadataka	Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	1998				
3,	Vladimir Katić, Darko Marčetić, Dušan Graovac	Energetska elektronika: Praktikum laboratorijskih vežbi	Univerzitet u Novom Sadu, Fakultet tehničkih nauka, Novi Sad	2000				

# STAS STUDIO

# UNIVERSITY OF NOVI SAD

# FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Table 5.2 Course specification

Course:			Analan Mina da da atantia Oine ita						
Course id:	EM301A		Analog Microelectronic Circuits						
Number of ECTS:	6								
Teachers:		Nađ F. La	aslo, Živanov B. Miloš						
Course status:		Elective	Elective						
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	2	2	1 0 0						
Precondition courses			None						

### 1. Educational goal:

Acquiring basic knowledge in the fields of analog microelectronic circuits, amplifiers, feedback, sine-wave oscillators, power supplies and converters. The students will be prepared for electronic circuit simulation. Acquiring basic knowledge needed for analog integrated circuit design.

# 2. Educational outcomes (acquired knowledge):

Ability to analyze and basic knowledge to design: voltage and power amplifiers, amplifiers with various frequency characteristics, amplifiers with feedback, operational amplifier circuits, sine-wave oscillators, power supplies. Acquiring the basic knowledge to design analog and basic digital integrated circuits.

# 3. Course content/structure:

Single- and multi-stage amplifiers, differential amplifiers, frequency characteristics of amplifier, power amplifiers, analysis of electronic circuits in SPICE, amplifiers with feedback, operational amplifiers, stability of feedback amplifiers, sine-wave oscillators, power supplies, active filters, polarization of analog integrated circuits, AD and DA converters.

#### 4. Teaching methods:

Lectures, auditory exercises, computer exercises, laboratory exercises, consultations

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Laboratory exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00			
Laboratory exercise defence	Yes	20.00						
Lecture attendance	Yes	5.00						

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	Miloš Živanov	Elektronika, pojačavačka kola, teorija i zadaci	FTN Izdavaštvo, Novi Sad	2004				
2,	S.Lj.Tešić, D.M.Vasiljević	Osnovi elektronike: komponente, pojačavačka kola, impulsna i digitalna kola	Građevinska knjiga, Beograd	1997				
3,	R.C.Jaeger	Microelectronic Circuit Design	McGraw-Hill Companies, Inc., New York	1997				
4,	A.S. Sedra., K.C. Smith	Microelectronic Circuit Design	Holt, Renehart@Winston, New York	1997				
5,	S. Marjanović	Elektronika 1	Beopres, Beograd	1998				
6,	J. Millman, A. Grabel	Microelectronics	McGraw-Hill Companies, Inc., New York	1987				
7,	M.B. Živanov	Elektronika - komponente, teorija i zadaci	Univerzitet u Novom Sadu	2002				

## ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:			_							
Course id:	English in Engineering 1									
Number of ECTS:	2									
Teachers: Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafranj F. Jelisaveta										
Course status:	Elective									
Number of active tea	ching classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	(	)	0	0	0					
Dan a san distinguish and a san and										

#### Precondition courses

## 1. Educational goal:

Mastering the most significant terms related to the profession and major. Developing strategies for understanding the foreign language text. Enabling students to read and understand original English texts from different sources related to numerous aspects and fields of electrical engineering. Developing oral and written communication related to these topics while using the adequate vocabulary and complex sentence structures.

#### 2. Educational outcomes (acquired knowledge):

Students know a wide range of vocabulary terms related to the field of study. They can read versatile literature in this field and communicate about those topics in the English language using the terms and sentence structures typical for the language of their future profession.

#### 3. Course content/structure:

Processing contemporary professional texts in English, related to different aspects in the field of electrical engineering profession. Developing strategies for understanding professional texts such as: skimming, scanning, comparing sources, using context, using background knowledge etc. Mastering the common terms related to the profession and major. Adopting the language functions such as: comparison, classification, expressing purpose or function, describing the constituents, causal connections and such. The most common prefixes, suffixes, compound words and collocations. Passive voice, participial constructions. Short forms of relative sentences (active and passive), short forms in different tenses (active and passive).

## 4. Teaching methods:

The emphasis is placed on student activities during the class, their interaction with the teacher and between themselves. The communicative approach is used in the lectures. Practice is designed to make it easier to understand the text as well as to practice particular vocabulary and other typical features of the professional language. Some exercises are designed to encourage students to further practice their language skills using the wider knowledge in the field of study through comments and explanations.

Knowledge evaluation (maximum 100 points)

					(·······)					
	Pre-examination obligations			Points	Final ex	Mandatory	Points			
Test			Yes	10.00	Written part of the exam	- tasks and theory	Yes	40.00		
Test	t		Yes	10.00	Oral part of the exam		Yes	30.00		
Test			Yes	10.00						
	Literature									
Ord.	Author		Title			Publishe	r	Year		
1,	John Eastwood	Oxford	Practice Gra	ammar, In	termediate	OUP		2006		
2,	Eric Glendinning, John McEwan	Oxford	d English in E	lectronics		OUP		1993		
3,	Grupa autora	Oxford	Oxford English - Serbian Dictionary			OUP		2006		
4,	Popić i dr.	Naučn	o tehnički reč	ćnik		Privredni pregled, B	eograd	1989		

# THE STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:					
Course id:	EM308A		Laborato	ory practice of electronics	
Number of ECTS:	3				
Teachers:					
Course status:		Elective			
Number of active tead	hing classe	es (weekly	)		
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:
0	(	)	2	0	0
Precondition courses			None		

## 1. Educational goal:

Gaining deepen knowledge in the field electronics.

- 2. Educational outcomes (acquired knowledge):
- Efficient analysis of electronic circuits and comparison against results measured on the physically realized electronic circuits a critical analysis of the results of measurements on electronic circuits the identification and elimination of the influence of secondary or parasitic effects on the electronic circuit measurements (the impact of measuring instruments, temperature, parasitic parameters of electronic components, voltage power ...)
- 3. Course content/structure:

During the course, the exercises will be done in the laboratory of electronics. Before each cycle exercise test input is taken. Exercises are based on the topics covered in subjects "Introduction to Electronics", "Digital Electronics" and "Analog microelectronic circuits". Exercise would be in the following areas: Temperature dependence of static characteristics of diode. Polarization of bipolar transistors (measuring current gain, change position of the operating point of transistors with temperature). Polarization of MOSFET (measurement B and VT). Measurement of the transistor amplifiers. Connection of basic operational amplifier circuits on the breadboard. The switching mode of transistors and MOSFETs. Analysis of combining digital networks. Hazards in combinational networks. Analysis of sequential networks. Hazards in combinational networks.

## 4. Teaching methods:

Laboratory practice which include measuring equipment in electronics.

	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandato			Mandatory	Points	Final e	exam	Mandatory	Points			
Laboratory exercise attendance Yes 5.00				Oral part of the exam		Yes	50.00				
Laboratory exercise defence Yes 45.00											
	Literature										
Ord.	Author		Title			Publisher		Year			
1,	M. Živanov	Elektro	onika, kompo	nente i po	jačavačka kola	FTN, Novi Sad		2003			
2,	S. Tešić, D. Vasiljević	Osnov	ri elektronike			Grosknjiga, Beograd		1994			
3,	D.Živković,M.Popović	Impuls	Impulsna i digitalna elektronika			ETF Beograd, Nauka		1996			
4,	M.Damnjanović	Praktil	Praktikum iz laboratorijskih vežbi iz elektronike			FTN, Novi Sad		2007			

# STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course	:								
Course	id:	EM3P0A							
Number	of ECTS:	3							
Teache	rs:								
Course	status:		Elective						
Number	of active teac	hing classe	s (weekly)						
L	ectures:	Practical	classes:	Other teachi	ng types:	Study rese	arch work:	Other cla	asses:
	0	0		2		0		1	
Precond	dition courses			None					
1. Educ	ational goal:								
2. Educ	ational outcom	nes (acquire	ed knowledge	):					
3. Cour	se content/stru	icture:							
4. Teac	hing methods:								
				Knowledge 6	evaluation	(maximum 100 points)			
	Pre-examina	ition obligat	ions	Mandatory	Points	Final e	xam	Mandatory	Points
Project				Yes	70.00	Project defence		Yes	30.00
					Liter	ature			
Ord.	А	uthor			Title		Publishe	er	Year
1,	Thomas Petr	uzzellis		ectronics Sensors for the Evil Genius:54 Electrifying McGraw-Hill/TAB Electrojects(Evil Genius)			lectronics	2006	
2,	Rudolf F. Gra Sheets	af, William				ircuits, Volume 7	McGraw-Hill/TAB Electronics		1998
3,	Richard Crov	vder				mechanical Systems	University of Southa Elsevier	ampton,	2006
4,	Jacques Bure	es		d Optics:Opti onents	cal Fibers	and All-fiber	Wiley		2008
5	Myko Drodko			onico Circuito	and Syst	ome	McGraw Hill/TAR E	lootronico	2005

## A STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EEI302		Systems of Autom	natic Control in Power Eng	jineering					
Number of ECTS:	7									
Teacher:		Kulić J. F	Filip							
Course status:		Elective								
Number of active teac	hing classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	3	3	0	0	0					
Precondition courses			None							

#### 1. Educational goal:

Introducing students to the theoretical and practical basis of analysis and synthesis of the automatic control system.

## 2. Educational outcomes (acquired knowledge):

Acquired knowledge can be used in solving specific engineering problems, and also represent the basis for further understanding of professional courses.

## 3. Course content/structure:

Quality assessment of control in the stationary and transient regime. Analysis of the system stability using analytical methods. Analysis and synthesis of the system using the root locus. Analysis and synthesis of the system in the frequency domain: Niquist criterion of stability, threats to stability, Bode method. The space concept of the system state. Choice and adjustment of the industrial controller parameters: PID controller. Introduction to digital control systems.

## 4. Teaching methods:

Lectures; Computing (N), Laboratory (L), Computer (C) and Computer-Laboratory (CL) Practice; Consultations. Part of the course which represents a logical whole can be passed in the form of colloquium. Colloquium and the examination are oral and written. Colloquium and the written part of the examination are taken in the written from, while oral part of the examination is oral. Course grade is formed based on the success in Colloquium, computer-laboratory practice and written and oral part of the examination.

		ŀ	Knowledge e	valuation	(maximum 100 points)						
	Pre-examination obligations		Mandatory	Points	Final ex	cam	Mandatory	Points			
Test			Yes	30.00	Oral part of the exam		Yes	20.00			
					Practical part of the exam	n - tasks	Yes	50.00			
	Literature										
Ord.	Author			Title	•	Publisher		Year			
1,	M. Stojić	Kontinu	ualni sistemi	automats	kog upravljanja	Naučna knjiga, Beograd		1996			
2,	. B.Kovačević, Ž.Đurović	Sistemi zadatal		g upravlja	anja -zbornik rešenih	Nauka, Beograd		1995			
3,	D. Kukolj i ostali		e klasične teo primere	orije autor	matskog upravljanja kroz	Somel, Sombor		1995			
4,	D. Kukolj, F. Kulić		ovanje sister u stanja	ma autom	atskog upravljanja u	Univerzitet u Novom Novi Sad	n Sadu,	1995			



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:		Microprocessor based measurement and data acquisition						
Course id:	EIDMS1			systems 1				
Number of ECTS:	7							
Teachers:	achers: Sovilj M. Platon, Mitrović Lj. Zoran, Bojković J. Gordana							
Course status: Elective								
Number of active teac	hing classe	es (weekly	')					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	(	)	2	0	1			
Precondition courses			None					

#### 1. Educational goal:

The acquisition of knowledge in the field of microprocessor based measurement and data acquisition systems.

## 2. Educational outcomes (acquired knowledge):

understanding application and architecture of microprocessor based measurement and data acquisition systems; the ability to work in interdisciplinary teams on understanding and solving problems related to the application of microprocessor based measurement and data acquisition systems; the ability to search the literature and other forms of information in the field of microprocessor based measurement and data acquisition systems and the ability of the presentation of research results; good knowledge and understanding of modules in microprocessor based measurement and data acquisition systems;

#### 3. Course content/structure:

The concept of measurement and data acquisition system. Introduction to data acquisition. Microprocessor Architecture of measurement and acquisition systems (analog signal converters, signal conditioners, modules for A / D and D / A conversion, microprocessors, microcontrollers, DSPs, programmable logic elements, ...). Computer and emebedded measurement and data acquisition systems. Application of personal computers, embedded processors and microcontrollers. Types and architecture of microcontrollers and embedded processors. Stanard hardware interfaces and protocols in the measurement and data acquisition systems (serial, parallel, IEEE 488, USB, Ethernet LAN, wireless). Plugin card for data acquisition. Data processing and analysis of measurement and data acquisition systems. Data storage and compression techniques. The commercial products for data acquisition. Development systems and tools. Introduction to the development of the microprocessor firmware and software in measurement and data acquisition systems. Introduction to distributed measurement and data acquisition systems. The role of measurement and acquisition in SCADA systems. Introduction to Web-based measurement and data acquisition systems. Development of microprocessor measurement and data acquisition systems. Development of microprocessor measurement and data acquisition systems based on PIC microcontroller families.

## 4. Teaching methods:

Lectures, auditory exercises, laboratory exercises, consultations.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Laboratory exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00					
Laboratory exercise defence	Yes	30.00								
Lecture attendance	Yes	5.00								
Project	Yes	30.00								

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	J. P., S. MacKay	Practical Data Acquisition for Instrumentation and Control Systems	Newnes	2003						
2,	H. Austerlitz	Data Acquisition Techniques Using PCs	Academic Press	2002						
3,	Steven F. Barrett, Daniel J. Pack	Microcontrollers Fundamentals for Engineers and Scientists	Morgan & Claypool	2006						

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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			Concern and transducers						
Course id:	EISMP	]	Sens	sors and transducers					
Number of ECTS:	7								
Teachers:		Milovanč	filovančev S. Slobodan, Mitrović Lj. Zoran, Vujičić V. Vladimir						
Course status:		Elective							
Number of active tea	aching class	es (weekly	<b>'</b> )						
Lectures:	Practica	classes:	Other teaching types:	Study research work:	Other classes:				
3		) 2		0	1				
Precondition course	s		None						

## 1. Educational goal:

Acquiring of basic knowledge in the field of sensors and transducers, physical properties of sensors, manufacturing process. Dependency of change of physical parameters on the quantity being measured, as well as ways to connect sensors in electric or electronic circuit and sensor signal conditioning.

## 2. Educational outcomes (acquired knowledge):

Introduction to the principles and application of sensors and transducers. The ability to simulate the operation of sensors and transducers using the modern software tools. Ability to design and use sensors and transducers. Ability to choose the appropriate sensor and transducer for different purposes.

#### 3. Course content/structure:

Introduction. Principles of operation and use of sensors. Types of sensors: capacitive, inductive, resistive, electromagnetic, the Hall-effect, ChemFET transistors, piezoelectric, optical, sensors, displacement sensors, radiation sensors, etc. Sensors of electrical and non-electrical quantities. Intelligent sensors. Metrology of sensors. Application and architecture of transducers. Adjustment (conditioning) of sensor signals. Analog and digital electronic circuits used in transducers. Surge protection. Maintaining signal quality. Software packages to simulate physical properties of sensors and transducers. Circuits for impedance matching.

## 4. Teaching methods:

Lectures, laboratory practice.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations	Final e	xam	Mandatory	Points							
Laborat	ory exercise defence	30.00	Written part of the exam	- tasks and theory	Yes	30.00						
		-	-	Coloquium exam		No	20.00					
				Coloquium exam		No	20.00					
				Oral part of the exam		Yes	40.00					
	Literature											
Ord.	Author		Title	е	Publisher		Year					
1,	Mladen Popović	Senzori i merenja	1		Zavod za udžbenike i nastavna sredstva Srpsko Sarajevo		2004					
2,	Mladen Popović	Senzori tečnosti i	gasova		Zavod za udžbenike i nastavna sredstva Srpsko Sarajevo		2003					
3,	Mladen Popović	Senzori u robotici			Viša elektrotehnička Beograd	a škola	1996					

## STAS STUDIO

## UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:									
Course id:	E227A		Logic Design of Computer Systems 1						
Number of ECTS:	6								
Teachers:		Teslić Đ.	eslić Đ. Nikola, Pjevalica U. Nebojša						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	<b>'</b> )						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	0 2		0	1				
Precondition courses			None						

## 1. Educational goal:

Knowledge about the basics of digital system design.

## 2. Educational outcomes (acquired knowledge):

Knowledge about the basic techniques for designing and testing digital systems. The acquired knowledge provides the basis for understanding engineering courses which will follow.

## 3. Course content/structure:

Switching functions (analytical methods of representation, Functionally complete system and minimization). Finite automata (methods, time behaviour of synchronous sequential systems and minimum number of states). sequential system design. Combinational networks (standard modules and programmable combinational networks). Standard sequential networks (memory elements and registers). The notion of complex digital systems (AHPL, RTL and basic VHDL). Programmable combinational and sequent ional networks (PAL, PLD, CPLD, FPGA). Design of arithmetic logic unit. Logic design of processor control unit. Micro program control unit (description and realization with VHDL). Hypothetical processor (description and realization with VHDL).

## 4. Teaching methods:

Lectures, Tutorials. Computer practice. Consultations.

Students attend lectures, auditory practice and laboratory practice classes. Each laboratory practice is graded. There are three colloquia taken at laboratory practice classes. A colloquium consists of a test which checks students' theoretical knowledge and practical tasks at the computer.

Knowledge evaluation (maximum 100 points)

	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points
Homew	ork ork		Yes	5.00	Test		Yes	10.00
Homew	ork ork		Yes	5.00	Coloquium exam		No	20.00
Homew	ork		Yes	5.00	Coloquium exam		No	20.00
Homew	Homework			5.00	Theoretical part of the ex	am	Yes	30.00
			•		Practical part of the exan	n - tasks	Yes	40.00
				Liter	ature			
Ord.	Author			Title	)	Publishe	er	Year
1,	V. Kovačević		Logičko projektovanje računarskih sistema, Projektovanje digitalnih sistema Univerzite			Univerzitet Novi Sad	d	2009
2,	M. Katona, N. Teslić, V. Kovačević	1	Zbirka rešenih zadataka iz projektovanja digitalnih sistema			Univerzitet Novi Sad	d	2010

# A STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			Analysis of PES 2						
Course id:	EE0306								
Number of ECTS:	5								
Teacher:		Strezosk	trezoski C. Vladimir						
Course status:		Elective	Elective						
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		1	0	0	0				
Precondition courses			None						

## 1. Educational goal:

The nature of three-phase power electrical systems. Mathematical modeling of balanced power electrical systems. Basic problems: power flow and failure.

2. Educational outcomes (acquired knowledge):

Modeling and calculation of power electrical systems (transmission, production and distribution networks).

## 3. Course content/structure:

Power electrical system regulation: regulation of active power and frequencies and regulation of reactive power and voltage. Problems of power flow. Problems of failure (short circuits and phase interruptions).

## 4. Teaching methods:

Lectures; Auditory Practice; Consultations.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandatory Poir								
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	35.00			
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	35.00			
Term paper	Yes	20.00						
Literature								

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	V.C.Strezoski	Analiza elektroenergetskih sistema	FTN	2006				

## SECTION STUDIOS

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EISIK		Standardization and quality						
Number of ECTS:	4								
Teacher:		Spasić-J	Spasić-Jokić M. Vesna						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
1		0		0	2				
Precondition courses			None						

## 1. Educational goal:

Acquiring basic knowledge in the field of standardization, as well as the knowledge about creation and the use of standards and technical regulations, and also certification of systems, processes and products.

## 2. Educational outcomes (acquired knowledge):

The need for the creation and the use of standards. Ability to design and establish standardization system. Programming and planning in the standardization system. Ability to manage standardization system. Accreditation and certification of the system, processes and products.

## 3. Course content/structure:

The concept of standardization. Goals and principles of standardization. Standards and technical regulations. Accreditation and certification. Basic parameters of the standardization system. Environment of the standardization system. Normative regulations in the field of standardization. Model of the standardization system. Basic settings of the model. Subsystems of the standardization system. Relationships between subsystems of the standardization system. Programming and planning in the standardization system. Standardization system management.

## 4. Teaching methods:

Lectures; Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory						Points			
Project			Yes	30.00	Oral part of the exam		Yes	70.00	
	Literature								
Ord.	Author		Title			Publishe	r	Year	
1,	Mile Pešaljević	Inženj	Inženjerske komunikacije i logistika			FTN Novi Sad		1995	

## STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			5					
Course id:	EK300		Digital Modulations					
Number of ECTS:	5							
Teachers:		Miloševio	Milošević S. Vladimir, Petrović S. Vladimir, Stefanović D. Čedomir					
Course status:		Elective						
Number of active tead	ching classe	es (weekly	')					
Lectures:	Practical	I classes: Other teaching types:		Study research work:	Other classes:			
2		1 1 0 1						

## Precondition courses

## 1. Educational goal:

Mastering the principles of modulation methods for the digital signal transmission.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge, practical work (MATLAB simulations, DSP programming).

## 3. Course content/structure:

Signal transmission in the transposed frequency range (ASK, QAM, PSK, FSK, combined modulations, ODFM, Trelis encoded modulation). Probability of error in transmission of digitally modulated signals. Transmission of signals in the spread spectrum (DS, FH). Carrier synchronization.

## 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points
Homew	ork		Yes	10.00	Written part of the exam	- tasks and theory	Yes	70.00
Laborat	ory exercise defence		Yes	20.00	Coloquium exam		No	30.00
Literature								
Ord.	Author		Title			Publisher		Year
1,	G. Lukatela, D. Drajić, G. Petrović, R. Petrović	Digital	Digitalne telekomunikacije			Građevinska knjiga,	Beograd	1984
2,	I. S. Stojanović	Osnov	i telekomunik	acija		Građevinska knjiga,	Beograd	1977
3,	V. Milošević, V. Delić	Digital	Digitalne telekomunikacije - Zbirka zadataka			Edicija Tehničke knj Stylos, Novi Sad	ige, FTN i	1996
4,	B. Sklar	Digital	Communicat	tions		Prentice Hall, New	Jersey	1988
5,	V.Milošević, V.Delić, M.Narandžić, Č.Stefanović	Digital	Digitalne telekomunikacije WUS A					2005

# THE STUDIO

## UNIVERSITY OF NOVI SAD

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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EE307		Electric Machines 2						
Number of ECTS:	5								
Teacher:		Vasić V.	asić V. Veran						
Course status:		Elective	Elective						
Number of active tead	ching classe	es (weekly	<b>'</b> )						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	2	2	0	0	0				
Precondition courses			None						

## 1. Educational goal:

Acquiring basic knowledge in the field of electromechanical conversion of energy, electric machines, power electronic devices and electromotive drives.

- 2. Educational outcomes (acquired knowledge):
- understanding the basic principles of electromechanical conversion of energy
- understanding the basic properties and modes of rotary machines

## 3. Course content/structure:

Electric machines with DC. DC machines according to the excitation power. Parts and design, commutation, application, properties, movement, speed control. Synchronous machines, parts and construction, application, properties, parameters, equivalent circuit, vector diagrams, external properties, angular features, operating map.

## 4. Teaching methods:

The course consists of lectures and practice. Contemporary illustrations for intuitive understanding of the taught matter are used in lectures. In order to fully master the course, problems are solved in auditory practice which accompany lecture and encourage students to independently solve problems from the engineering practice. Part of the practice is carried out in the laboratory.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandatory Point								
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00			
Laboratory exercise attendance	Yes	5.00	Coloquium exam	Yes	20.00			
Test	Yes	20.00	Coloquium exam	Yes	20.00			
	Literatura							

		Literature		
Ord.	Author	Title	Publisher	Year
1,	B. Jurković, Z. Smolčić	Kolektorski strojevi	Školska knjiga	1986
2,	Z. Sirotić, Z. Maljković	Sinkroni strojevi	FER	1996
3,	A. Dolenc	Sinhroni strojevi	Sveučilište u Zagrebu	1982
4,	P. C. Sen	Principles of Electric Machines and Power Electronics	JOHN WILEY & SONS	1997
5,	J. J. Cathy	Electric Machines: Analysis and Design Applying Matlab	McGRAW-HILL BOOK COMPANY	2001
6,	S. J. Chapman	Electric Machinery Fundamentals	McGRAW-HILL BOOK COMPANY	199

## STAS STUDIO

## UNIVERSITY OF NOVI SAD

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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:								
Course id:	El410		Biophysics					
Number of ECTS:	5							
Teachers:		Satarić V	Satarić V. Miljko, Spasić-Jokić M. Vesna					
Course status:		Elective						
Number of active tead	ching classe	es (weekly	r)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	2	2	0 0 0					
Precondition courses			None					

#### 1. Educational goal:

Introducing students to the part of medical physics which studies physical principles of the human body, i.e., physics of physiology of the human body.

## 2. Educational outcomes (acquired knowledge):

General capabilities: Ability to work in an interdisciplinary team of physicists and doctors trying to understand and solve problems related to the human body functioning; Understanding the nature and ways of physical research and physics application in medicine; Ability to research relevant literature and other forms of information. Subject-specific abilities: Understanding functioning of the human body and application of physical principles on the human body viewed as a physical system (cybernetic, thermodynamic) of specific characteristics; Understanding the physical basis of functioning of some human body systems (musculoskeletal, cardiovascular, nervous); Understanding physical basis for functioning of human senses (sense of hearing and sight).

#### 3. Course content/structure:

Theoretical lectures. Human body as cybernet system: systems, cybernetic systems, regulatory system in the human body; modeling. Biomechanics of musculoskeletal human system: elements of musculoskeletal system; functioning of the musculoskeletal system-models; real systems. Biomechanics of cardiovascular system: characteristics of blood flow through blood vessels; the cardiovascular system; skin effect. Thermodynamics of the human body: thermodynamic systems and thermodynamic principles; energy changes in the body. Transport processes in the human body: the transport of the heating energy; diffusion, transport of substances through cell membranes. Electrical processes in the human body: electric signals and their registration; functional diagnostics; application of electricity and magnetism on the human body. Bioacoustics: mechanical oscillations and waves; sound; human ear as a hearing device. Visible light, UV and IR in diagnostics and therapy; eye physics and vision. Practical lectures; Practice that accompanies theoretical lecture programme or visits to the adequate clinics of the Medical Faculty in order to get introduced to the practical application of certain devices. Term paper: Detailed analysis of the selected issues from one of the above listed areas and presentation in the electronic form.

## 4. Teaching methods:

Lectures. Auditory Practice.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Exercise attendance	Yes	5.00	Coloquium exam	No	20.00			
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	40.00			
Project	Yes	50.00		·				

#### Literature Ord. Author Title Publisher Year 2006 S. Stanković Fizika ljudskog organizma PMF Novi Sad Springer Sciences+Business Intermediate Physics for Medicine and Biology, 3rd 2, R. K. Hobbie 1997 Media, Inc., USA

# ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:		ID ( )						
Course id:	EK321		IP technology					
Number of ECTS:	5							
Teachers:		Vukobratović V. Dejan, Lončar-Turukalo G. Tatjana						
Course status:	e status: Elective							
Number of active teac	hing classe	es (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	1	1	1	0	2			
Precondition courses			None					

## 1. Educational goal:

Acquiring advanced knowledge in IP technology and IP communications.

2. Educational outcomes (acquired knowledge):

Capability to understand the set of protocols within IP protocol stack and advanced knowledge in routing techniques in IP networks.

3. Course content/structure:

TCP/IP protocol stack, Internet addressing, Basics of IP protocol, ARP and ICMP protocol, Routing in IP networks, Transport layer - UDP, TCP, Flow control in IP networks, IP/MPLS networks, IP services and QoS.

4. Teaching methods:

Lectures, tutorial sessions, and lab exercise.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points	
	Coloquium exam							30.00	
	Theoretical part of the exam Yes								
	Literature								
Ord.	Ord. Author Title Publishe						r	Year	
1,	1, Andrew Tannenbaum Computer Networks Prentice Hall							2002	

## S DE STUDIO S

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:								
Course id:	EM303		Microelectronics					
Number of ECTS:	7							
Teacher:		Živanov D. Ljiljana						
Course status:		Elective						
Number of active tead	ching classe	s (weekly	)					
Lectures:	Practical	classes: Other teaching types: Study research work: Other classes:						
3	2	)	1 0 0					

#### Precondition courses

## 1. Educational goal:

Acquiring basic knowledge in the field of microelectronic technologies, integrated circuit design and characteristic, technology of micro sensor, MEMS and three-dimensional integrated circuit production.

- 2. Educational outcomes (acquired knowledge):
- ability to design electrical schemes of simple logical circuits in CMOS technology using Full-custom and Semi-custom method
- -ability to design masks of simple integrated circuits using CAD software tool
- -ability to simulate basic Pf/microwave integrated circuits (inductors, capacitors, filters)
- -ability to carry out simple measurements on silicon wafer

## 3. Course content/structure:

Methods of obtaining massive and thin single crystals. Planar operations in the preparation of Si integrated circuits. Production of Si bipolar integrated circuits. Production of Si unipolar (NMOS, CMOS) integrated circuits. Making the BiCMOS integrated circuits. Full-custom and semi-custom approach to design masks for integrated circuits. Design rules in the L-EDIT software tool. Designing masks of the basic CMOS logic circuits. Measuring and testing of integrated circuits on Wafer. Examples of design and simulation of basic Rf/microwave integrated circuits. The basis of nanotechnology and MEMS technology. Technology for micro sensor, micro machine and micro system production. Thick- and thin-film integrated circuits. Limitations in the design and fabrication of contemporary integrated circuits. Three-dimensional integrated circuits.

## 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final ex	kam	Mandatory	Points	
Computer exercise attendance			Yes	5.00	Final exam - part one		Yes	30.00	
Laborat	ory exercise attendance		Yes	5.00	Final exam - part two	Final exam - part two Yes		30.00	
Project			Yes	30.00					
	Literature								
Ord	Author			Title		Puhlishe	er .	Year	

Ord.	Author	Title	Publisher	Year
1,	N. H. E. Weste, K. Esharaghian	Principles of CMOS VLSI Design	Addison-Wisley Pub.Com.Inc.	2005
2,	R. Jacob Baker, Harry W. Li, David E. Boyce	CMOS , Circuit Design, Layout, and Simulation	Wiley-IEEE Press	2001
3,	Adel S. Sedra, Kenneth C.	Microelectronic Circuits (The Oxford Series in Electrical and Computer Engineering)	Oxford University	2003
4,	J. D. Plummer, M. D. Deal and P. B. Griffin	Silicon VLSI Technology: Fundamentals, Practice, and Modeling	Prentice Hall	1996
5,	Jogn P. Uyemura	Physical Design of CMOS Integrated Circuits Using L- EDIT	PWS Publishing Company	1995
6,	Lj. Živanov, G. Stojanović	Mikroelektronika sa primerima i zadacima	WUS Austria & FTN Novi Sad	2005



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:		Academic Written and Spoken Communication in the Serbian					
Course id:	E1270		Language				
Number of ECTS:	2						
Teacher:		Pavlović	Pavlović J. Slobodan				
Course status:	tus: Elective						
Number of active teac	hing classe	es (weekly	r)				
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:		
2	(	)	0 0 0				
Precondition courses			None				

#### 1. Educational goal:

Acquiring and improving the academic communication competencies in the Serbian language;

## 2. Educational outcomes (acquired knowledge):

Ability to recognize functional-style register in the Serbian language and perception of their context conditioning, and ability of involvement in scientific function-style discourse.

#### 3. Course content/structure:

The concept and structure of verbal communication. Stratification of natural human language. Functional-style stratification of the Serbian language. Conversational discourse (communication by e-mail). Administrative discourse (creating the correspondence genres: CVs, applications, appeals, requests...). Journalistic discourse. Fictional discourse. General characteristics of the scientific discourse. Styles of scientific discourse and their organization: academic style, textbook style, popular scientific style. Development of the scientific paper: types and structures of scientific work; documentation feedback of the scientific work (citations, footnotes, bibliography); language and style of the scientific work; technical processing of the scientific work. Typical substandard phenomenon in the academic communication and their correction: spelling mistakes; word choice; sentence structure.

## 4. Teaching methods:

At the beginning of the course all students take an entrance examination which determines the culture level of the written and spoken communication of each student. Knowledge testing is done continually during the course. Final examination is written and oral and has an objective to evaluate the improvement of each student compared to the level presented at the entrance examination.

The complexity of functions which successful communication should fulfill is demonstrated through interactive exercises in small groups (expression of personal attitude, research results, exchanging views, evaluation of other people's arguments in the written or spoken form, negotiation, etc.). Practice develops the understanding of context in which communication takes place.

Knowledge evaluation (maximum 100 points)

Monological method, dialogic method, work on the text method, corrective method;

					(maximum ree penne)			
Pre-examination obligations			Mandatory	Points	Final ex	cam	Mandatory	Points
Lecture	attendance		Yes	10.00	Oral part of the exam		Yes	50.00
Term pa	aper		Yes	40.00				
				Liter	ature			
Ord.	Author			Title	;	Publishe		
1,	Blommaert, J.	Discou	Discourse			Cambridge: Cambri University Press	dge	2005
2,	Burgoon, J. K., Buller, D. B., & Woodall, W. G.	Nonve (2nd e		ication: T	he unspoken dialogue	New York: McGraw-	-Hill	1996
3,	Bonvillian, N.		Language, Culture and Communication: The Meaning of Messages			NJ: Prentice Hall		1993
4,	Cassell J. & Mcneill, D.	Gestu	Gesture and the poetics of prose			Poetics Today, 12,	375-404	1991
5,	Severin, Werner J., Tankard, James W., Jr.	Comm	unication The	eories: Or	igins, Methods, Uses	New York: Hastings	House.	1979

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation





Engineering

Table 5.2 Course specification

Course:							
Course id:	EE308	Power Electronics 2					
Number of ECTS:	5						
Teachers:		Čelanović L. Nikola, Katić A. Vladimir, Marčetić P. Darko					
Course status:		Elective					
Number of active tead	hing classe	es (weekly	')				
Lectures:	Practical	I classes: Other teaching types: Study research work: Other class					
2	1		1 0 0				

#### Precondition courses

## 1. Educational goal:

Power Electronics 2 course objective is to enable students to design and apply contemporary devices for steady supply of DC and AC consumers by converting parameters of electricity and using the powerful electronic switching components. Besides, the objective is to introduce students to the methods of computer modeling and modern software for this purpose, as well as acquisition of necessary practical experience for the application of acquired knowledge in the economy through laboratory work.

## 2. Educational outcomes (acquired knowledge):

By mastering the course Power Electronics 2, students will be able to apply principles and methods of operations of stable power supply, that is, DC and AC supply with strong electronic components, to model, design, solve and calculate these circuits, as well as to carry out computer simulations and apply commercial solution in different practical applications.

#### 3 Course content/structure:

DC power supplies (DC/DC converters). Chopper-principles, types, classification, modes, mathematical models. DC power supplies-basic requirements, operating principles, types. Linear power supplies. Switching power supplies without galvanic isolation –the concept and classification. Buck converter. Boost converter. Buck/Boost converter. Ćuk converter. Switching power supply with galvanic isolation -the concept and classification. Flyback and forward power supply. Push-pull power supply, and bridge and semi bridge power supply. Methods of modeling power converters. Modeling of the switching power supplies by space state averaging. Management methods and regulation of energy converters. Examples of application of power electronic devices.

## 4. Teaching methods:

Lecture method includes theoretical approach through presentation of system operation principles of DC and AC power supplies, calculation problem solution of these converters and practical work and measurements in the laboratory through the set of laboratory practice.

Knowledge evaluation (maximum 100 points)								
Nitowieuge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Laboratory exercise attendance	Yes	5.00	Practical part of the exam - tasks	Yes	50.00			
Laboratory exercise defence	Yes	20.00						
Lecture attendance	Yes	5.00						
Test	Yes	10.00						
Test	Yes	10.00						

#### Literature Ord. Author Title Publisher Year Elektrotehnički fakultet i Branko Dokić Energetska elektronika: pretvarači i regulatori Banjaluka Company, Banja 2000 Luka Univerzitet u Novom Sadu, Vladimir Katić Fakultet tehničkih nauka, Novi 2, Energetska elektronika - zbirka rešenih zadataka 1998 Univerzitet u Novom Sadu, Vladimir Katić, Darko Energetska elektronika - Praktikum laboratorijskih Fakultet tehničkih nauka, Novi 2000 3 Marčetić, Dušan Graovac vežbi Sad

Strana 77 Datum: 18.12.2012

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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			_						
Course id:	EE309	]	Power Distribution Systems						
Number of ECTS:	6								
Teacher:		Nimrihter	Nimrihter D. Miroslav						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	3	3	0 0 0						
Precondition courses			None						

## 1. Educational goal:

The basic objective of the course is acquiring knowledge about components and configurations of distribution networks. Besides, the goal is to acquire knowledge in the filed of building the distribution network while satisfying the requirements set by the consumers, owners of distribution networks, as well as regulation agencies.

## 2. Educational outcomes (acquired knowledge):

Introduction to the basic elements of the distribution networks, introduction to the risk and quality management methods of electrical energy, introduction to the methods and economic evaluation of decisions, introduction to the human life protection methods from the dangerous voltage.

#### 3. Course content/structure:

Elements of the power distribution systems (consumer areas, cable lines, primary and secondary transformer stations, distributed generators). Overhead lines and their sizing. State estimation in radial networks. Treatment of reactors in primary stations. Distribution automation (DA) and assessment of its impact on the risk of power supply. Safety of human lives and material goods. Techno-economic analysis in planning the development and maintenance of PDS. Risk management. Management by ownership of the power company.

## 4. Teaching methods:

Lectures. Auditory Practice. Consultations

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandatory Points								
Lecture attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00			
Term paper	Yes	20.00	Oral part of the exam	Yes	35.00			
Test	Yes	10.00						

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	E.Lakervi, E.J. Holmes	Electricity Distribution Network Design	Peter Peregrinus	1995					
2,	H. Lee, Willis	Power Distributoion Planning Reference Book	Marcel Dekker	1997					
3,	T. Goenen	Power Distribution System Engineering	McGraw-Hill, New York	1986					
4,	M. Nimrihter	Beleške sa predavanja iz Distributivnih sistema	Knjiga u elektronskoj formi, stoji u pripremi	2007					
5,	M. Nimrihter, P. Đapić	Proračuni u Distributivnim Električnim Sistemima	Knjiga u elektronskoj formi	2008					
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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EK301	Measurement Systems in Telecommunications							
Number of ECTS:	4								
Teachers:		Tomić J.	Tomić J. Josif, Vujičić V. Vladimir						
Course status:		Elective	Elective						
Number of active tead	hing classe	es (weekly	)						
Lectures:	Lectures: Practical classe		Other teaching types:	Study research work:	Other classes:				
2 1 1 0									
Precondition courses			None						

#### 1. Educational goal:

Acquiring the knowledge in the field of measurement systems in telecommunications.

## 2. Educational outcomes (acquired knowledge):

Getting acquainted with measurement principles in digital communications. Ability to perform and analyze fundamental tests for the characterization of digital communication systems. Hands on experience in attesting and fault measurements on the first and second OSI layer in copper access networks.

#### 3. Course content/structure:

Fundamentals of measurements in digital communications • Conformance tests • Functional tests • Performance tests • Protocol analysis • Quality of service tests • OSI referent model • Standards and recommendations • Systems of physical quantities and arithmetical operations with units of special interest in communication systems • Measurement errors and processing of measurement results • BERT • BLERT • Synchronization with measured signal • Measuring jitter in time and frequency domain • Fundamentals of copper access networks • Physical parameters of copper cables • Faults and measurement logistics • Characteristic cases of faults in copper access networks and overview of methods suitable for their location • Measurement diagnostics (ground resistance, fault voltage and isolation resistance measurements) • Measuring bridges for fault pre-location • Time domain reflectometry • Cable routers and tracers

## 4. Teaching methods:

Lectures. Auditory Practice. Laboratory Practice.

	Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points		
Laborat	ory exercise defence		Yes	30.00	Written part of the exam	- tasks and theory	Yes	70.00		
				Liter	ature					
Ord.	Author		Title Publisher					Year		
1,	B. Antić, M. Nikolić, N. Pjevalica, S. Milovančev, M. Urekar, I. Župunski, Z. Mitrović	Rad s	a instrumentir	na u prist	upnoj mreži	FTN Novi Sad		2007		
2,	B. Antic, M. Nikolic, N. Pjevalica, V. Pjevalica, S. Milovancev, I. Zupunski, M. Urekar	Napre	Napredna merenja u pristupnoj mreži			FTN Novi Sad		2008		
3, B. Antić, M. Nikolić, N. Pjevalica, V. Pjevalica Merenja na paricama za širokopojasni prenos FTN Novi Sad							2008			

## FACULTY OF THE

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EM304	Impulse and Digital Electronic Circuits							
Number of ECTS:	7								
Teacher:		Nađ F. Laslo							
Course status:		Elective							
Number of active tea	ching class	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		2 1 0 0							
Precondition courses	Precondition courses								

## 1. Educational goal:

Acquiring basic knowledge in the field of application of semiconductor devices as switches, analysis and design of circuits with switches. Introduction to the methods, characteristics and application of basic digital electronic components in the most important families of logic circuits. Introduction to the most important pulse circuits. Connecting theoretical and practical knowledge about these issues.

- 2. Educational outcomes (acquired knowledge):
- -ability to interpret catalogue data of semiconductor switching components
- -ability to design basic excitation circuits for optimum switch control
- -ability to analyze and design typical pulse circuits, including computer-assisted simulations and measurements in the laboratory
- -ability to assess the way of formation and spreading of impulse noise in electronic devices, and the basics of fighting against it -ability to analyze and design basic pulse circuits.

#### 3. Course content/structure:

The most common non-sinusoidal signals (pulses). Ideal and real switches. Semiconductor devices as switches (diodes, bipolar transistors, MOSFETs, thyristors, other components); the operation method, characteristics, modeling, optimum usage. Shaping circuits (linear and nonlinear, with and without amplifier). Comparators. Characteristics of logic circuits. The most important family of logic circuits (TTL, CMOS, BiCMOS, ECL, GaAs circuits): the basic gate, characteristics, application. Digital signal propagation in transmission lines. Non-standard applications of logic circuits. Bistable circuits. Astable circuits. Monostable circuits. Linear signal generators. Function generators.

## 4. Teaching methods:

Lectures; Auditory Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)									
		Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points	
Lab	orat	ory exercise defence		Yes	30.00	Written part of the exam	- tasks and theory	Yes	60.00	
						Oral part of the exam		Yes	10.00	
	Literature									
0	rd.	Author		Title Publisher					Year	
	1,	L.Nađ	Impuls	na i digitalna	elektrons	ka kola - skripta	FTN Novi Sad		2004	
	2, L.Nađ, M.Damnjanović, Zbirka rešenih ispitnih zadataka iz impulsne elektronike								2007	
	3, S.Tešić, D.Vasiljević Osnovi elektronike (Glava: Impulsna kola) Građevinska knjiga Be					Beograd	2005			
	4,	D.Živković,M.Popović	Impuls	sna i digitalna	elektronil	ka (Glave 1 - 10)	Nauka ETF Beogra	d	1992	

## NO DE STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			_							
Course id:	EE309	]	Power Distribution Systems							
Number of ECTS:	6									
Teacher:		Nimrihter D. Miroslav								
Course status:		Elective								
Number of active tead	ching classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	3	3 0 0 0								
Precondition courses			None							

## 1. Educational goal:

The basic objective of the course is acquiring knowledge about components and configurations of distribution networks. Besides, the goal is to acquire knowledge in the filed of building the distribution network while satisfying the requirements set by the consumers, owners of distribution networks, as well as regulation agencies.

## 2. Educational outcomes (acquired knowledge):

Introduction to the basic elements of the distribution networks, introduction to the risk and quality management methods of electrical energy, introduction to the methods and economic evaluation of decisions, introduction to the human life protection methods from the dangerous voltage.

#### 3. Course content/structure:

Elements of the power distribution systems (consumer areas, cable lines, primary and secondary transformer stations, distributed generators). Overhead lines and their sizing. State estimation in radial networks. Treatment of reactors in primary stations. Distribution automation (DA) and assessment of its impact on the risk of power supply. Safety of human lives and material goods. Techno-economic analysis in planning the development and maintenance of PDS. Risk management. Management by ownership of the power company.

## 4. Teaching methods:

Lectures. Auditory Practice. Consultations

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandatory Points								
Lecture attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00			
Term paper	Yes	20.00	Oral part of the exam	Yes	35.00			
Test	Yes	10.00						

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	E.Lakervi, E.J. Holmes	Electricity Distribution Network Design	Peter Peregrinus	1995						
2,	H. Lee, Willis	Power Distributoion Planning Reference Book	Marcel Dekker	1997						
3,	T. Goenen	Power Distribution System Engineering	McGraw-Hill, New York	1986						
4,	M. Nimrihter	Beleške sa predavanja iz Distributivnih sistema	Knjiga u elektronskoj formi, stoji u pripremi	2007						
5,	M. Nimrihter, P. Đapić	Proračuni u Distributivnim Električnim Sistemima	Knjiga u elektronskoj formi	1999						

## STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:		Digital Image Processing								
Course id:	EK421									
Number of ECTS:	5									
Teachers:		Crnojević S. Vladimir, Sečujski S. Milan								
Course status:		Elective								
Number of active tea	ching classe	es (weekly	r)							
Lectures:	es: Practical classes		Other teaching types:	Study research work:	Other classes:					
3	(	0 2 0								
Precondition courses			None							

## 1. Educational goal:

Introduction to the basic concepts in the field of digital image processing; introduction to the contemporary methods in digital image processing.

2. Educational outcomes (acquired knowledge):

An overview of principles of contemporary methods for digital image processing.

Ability to understand the basic principles and methods used in digital image processing, possibility of independent realization of simple systems for digital image processing, as well as possibility of simple extension of knowledge by working on a specific problem.

3. Course content/structure:

Introduction to digital image processing. Basic concepts in image processing. Image improvement in space domain. Image improvement in frequency domain. Image restoration. Color image processing. Image compression.

4. Teaching methods:

Lectures; Computer Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations Mandatory Points Final exam Mandatory F								
Project	Project defence Yes 30.00 Theoretical part of the exam						Yes	70.00	
	Literature								
Ord.	Ord. Author Title Publisher							Year	
1,	1, Rafael Gonzalez, Richard Woods Digital Image Processing 2nd Ed.							2002	

## ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:			<u> </u>					
Course id:	EM302A	Discrete-time systems and signals						
Number of ECTS:	6							
Teacher:		Novak O. Ladislav						
Course status:		Elective						
Number of active tead	hing classe	es (weekly	r)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3		1 1 0 1						
Precondition courses			None					

## 1. Educational goal:

Providing a general insight into fundamental aspects of discrete system theory including algorithms for analysis of linear time invariant discrete systems in the time and complex domain, digital filters and harware implementation of discrete systems.

## 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will gain an insight into basic concepts of signal and system theories of discrete time which includes: - handling signals with discrete time - understanding general description of discrete systems, and their classification and qualitative properties - an overview of algorithms for the analysis of linear time-invariant discrete systems in time and complex domain and the concept of digital filtering, as well as techniques and procedures for hardware implementation of general discrete systems.

#### 3. Course content/structure:

The concept of discrete time axis, the concept of signals with discrete time and operations with signals with discrete time. Fundamental aspects of the signal theory with discrete time in the arbitrary field. Operations with signals with discrete time in the field of real numbers. Bilateral Z-transformation, Unilateral Z-transformation, Discrete Fourier transformation. Fundamental aspects of the discrete system theory, description of the terminal behavior of the discrete system elements, their classification and connection. Linear time invariant discrete systems: analysis in the time domain and stability. Analysis of the linear time invariant discrete systems using unilateral Z-transformations and discrete Fourier transformations. The concepts of filtering, introduction to classification and synthesis of digital filters. Hardware implementation of discrete systems.

## 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points					Final ex	xam	Mandatory	Points
Comput	ter exercise attendance		Yes	10.00	Written part of the exam	- tasks and theory	Yes	70.00
Lecture	attendance		Yes	10.00				
Test			Yes	10.00				
Literature								
Ord.	Author			Title		Publisher		Year
1,	L. Novak	Diskre	tni sistemi - s	kripte		FTN, Novi Sad		2000
2,	R. Struharik	Labora	atorijske vežb	e iz diskr	etnih sistema - skripte	FTN, Novi Sad		2001
3, Mrinal Mandal, Amir Asif Continuous and Discrete Time Signals and Systems					Cambridge Univers	ity Press	2007	
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## NING SALES OF THE PARTY OF THE

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:	_									
Course id:	E230	Logic Design of Computer Systems 2								
Number of ECTS:	8									
Teacher:		Atlagić S. Branislav								
Course status:		Elective								
Number of active tea	ching classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
4		)	3	0	1					

#### Precondition courses

## 1. Educational goal:

Students learn about the basics of computer systems and are trained to design a central processor and realize simple assembler programs.

## 2. Educational outcomes (acquired knowledge):

Knowledge about basic notions, standards and technologies in the field of computer systems as well as ability to design and realize simple computer structures.

## 3. Course content/structure:

Introduction (definition of structure, single processor and multiprocessor structures, functional units, methods of connecting functional units). Central processor design (signal timing, address regimes, machine language, description of processor in VHDL, processor management). Memory design (RAM, DRAM, FLASH memory, methods for increasing memory reliability, associative memory, fast memory, hidden memory, memory management) Input- Output subsystem (methods and techniques of U/I subsystem communication with CPU, peripheral units, input output management). Transmission lines between functional units (standards, ISA, PCI, etc). Computer systems with multiple functional units. Local area networks as multiprocessor structures. Examples of computer structure design with VHDL (microcontroller, ALU) Assembler language, Macroassembler language, Machine –program connection. Examples of practical programming of devices.

## 4. Teaching methods:

Lectures. Tutorials. Computer practice. Consultations.

Students attend lectures and computer practice classes. At the end of the semester the acquired practical knowledge is assessed at the regular examination. The examination is taken using computer and suitable literature.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations Mandatory Points				Final ex	Final exam		Points			
Laborat	ory exercise defence		Yes	30.00	Coloquium exam		No	40.00		
			Theoretical part of the ex	cam	Yes	40.00				
					Practical part of the exam	n - tasks	Yes	30.00		
	Literature									
Ord.	Author			Title	•	Publishe	er	Year		
1,	V.Kovačević	LOGIC SISTE		CTOVANji	E RAČUNARSKIH	Univerzitet u Novon	n Sadu	1996		
2,	2, Branislav Atlagić PROJEKTOVANJE RAČUNARSKIH SISTEMA, skripta						1996			
3,	Zoran Krajačević	PRAKTIKUM LABORATORIJSKIH VEŽBI						1996		

## TAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	Course id: EJEI2 English in Engineering 2									
Number of ECTS:	2									
Teachers: Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafra F. Jelisaveta										
Course status:		Elective								
Number of active tea	ching classe	es (weekly	)							
Lectures:	Practical	I classes: Other teaching types:		Study research work:	Other classes:					
2	0	0								
5										

#### Precondition courses

## 1. Educational goal:

Further mastering the vocabulary related to profession and major and developing the ability to understand texts from different sources. Acquiring complex sentence structures typical for the professional language.

## 2. Educational outcomes (acquired knowledge):

Students possess certain vocabulary present in the scientific technical discourse and are able to use it properly. They are able to read literature related to their field of study, as well as other different forms of technical communication: instructions, brochures, reports etc. In the communication with colleagues they are able to understand and use typical constructions and collocations etc.

#### 3. Course content/structure:

Processing of professional texts in English and other forms of technical communication and analysis of their characteristics. Extending the professional vocabulary while adopting common abbreviations. The formation and interpretation of abbreviations. The use of modal verbs and other phrasal verbs. The use of infinitive. The use of -ing clause for expressing the action results.

## 4. Teaching methods:

Lectures are organized around processing certain number of professional texts. Besides traditional exercises for checking the understanding, students solve certain number of exercises using the so called task based approach during the lectures. Typical constructions, expression, phrasal verbs etc. are practiced through communication.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory Poir									
Test	Yes	10.00	Written part of the exam - tasks and theory	Yes	40.00				
Test	Yes	10.00	Oral part of the exam	Yes	35.00				
Test	Yes	10.00							

	Literature										
Ord.	Author	Publisher	Year								
1,	A.J. Herbert	The Structure of Technical English (odabrana poglavlja)	Longman	1989							
2,	E. and N. Glendinning	Oxford English for Electrical and Mechnaical Engineering (odabrana poglavlja)	OUP	2001							
3,	Grupa autora	Oxford English - Serbian Dictionary	OUP	2006							
4,	John Eastwood	Oxford Practice Grammar Intrmediate	OUP	2006							
5,	Popić i dr.	Naučno tehnički rečnik	Privredni pregled, Beograd	1989							
	-	-									



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:											
Course id:	EEI310	Industrial systems and protocols									
Number of ECTS:	7										
Teacher:	er: Marčetić P. Darko										
Course status:		Elective	Elective								
Number of active tead	ching classe	es (weekly	)								
Lectures:	Practical classes		Other teaching types:	Study research work:	Other classes:						
3		1	2	0	0						
Precondition courses			None								

## 1. Educational goal:

Introducing students to modern information technology and methods of application of those technologies while monitoring and control of various control processes. Acquiring basic knowledge about microcomputer for operation in industrial environments as well as about standard ways of exchanging data within the industrial system.

- 2. Educational outcomes (acquired knowledge):
- 1) Good knowledge of elementary microcomputer operation and operation of industrial devices and microcomputer based systems, 2) Excellent knowledge of the most commonly used industrial communication protocols, 3) as well as introduction to the basic principles for connecting devices to Internet.
- 3. Course content/structure:
- 1. Elementary microcomputer (internal architecture, working principle, organization of programmes, types of communication ports) 2. Programmable Logic Controllers PLC (principle of operation I/O, expansion for support of modern information technologies) 3. Industrial communication protocols of lower order (asynchronous data: RS-232 and RS-458, synchronous data: SPI and I2C) 4. Industrial communication protocols of higher order (MODBUS, PROFIBUS, Industrial Ethernet). 5. Networking of computers, PLC controllers and other equipment (communication with sensors and actuators e.g. Multimeter Siemens SIMEAS Q, SCADA system for monitoring and acquisition of measured values) 6. Basic principles of Internet connection (LAN and Ethernet applications, Basic Internet Protocol TCP/IP)
- 4. Teaching methods:

 $Lectures; \ Auditory \ Practice; \ Computer \ Practice; \ Laboratory \ Practice; \ Consultation.$ 

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Final ex	am	Mandatory	Points					
Homework	Yes	5.00	Coloquium exam		Yes	40.00			
Laboratory exercise attendance	Yes	5.00	Oral part of the exam		Yes	30.00			
Test	Yes	20.00							
		Liter	ature						
· · · · · · · · · · · · · · · · · · ·									

			Literature		
	Ord.	Author	Title	Publisher	Year
	1,	Nebojša Matić	Uvod u industrijske PLC kontrolere	Mikroelektronika	2007
L	١,	Nebojsa Matic	Ovod d industrijske i EO kontrolere	WIKIOEIEKUOTIKA	_



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:		Mi	Microprocessor based measurement and data acquisition							
Course id:	EIDMS2		systems 2							
Number of ECTS:	7	Systems 2								
Teachers:		Sovilj M.	Sovilj M. Platon, Bojković J. Gordana, Mitrović Lj. Zoran							
Course status:		Elective	Elective							
Number of active tead	hing classe	es (weekly	r)							
Lectures:	Practical classe		Other teaching types:	Study research work:	Other classes:					
3	(	0 2		0	1					
Precondition courses			None							

#### 1. Educational goal:

The acquisition of knowledge in the field of application, design and development of microprocessor based measurement and data acquisition systems.

## 2. Educational outcomes (acquired knowledge):

understanding of the methods of design and development of microprocessor based measurement and data acquisition systems; the ability to work in interdisciplinary teams for design and development of microprocessor based measurement and data acquisition systems; the ability to search the literature and other forms of information in the field of design and development of microprocessor based measurement and data acquisition systems and the ability of the presentation of research results;

#### 3. Course content/structure:

Lifecycle of microprocessor based measurement and data acquisition systems. Requirements analysis and creation of functional specifications for microprocessor based measurement and data acquisition systems. Methods of design and development of microprocessor based measurement and data acquisition systems. Programming languages for the development of firmware in microprocessor based measurement and data acquisition systems. Integrated development environment for the design and development of microprocessor based measurement and data acquisition systems. Testing and debugging microprocessor based measurement and data acquisition systems. Preparing documents for microprocessor based measurement and data acquisition systems. Practicum in the design and development of hardware and firmware of microprocessor based measurement and data acquisition systems. Development of measurement and acquisition systems based on PSoC microcontroller families. Development of measurement and acquisition systems based on AVR microcontroller families. Development of measurement and acquisition systems based on Bocontroller families.

Knowledge evaluation (maximum 100 points)

## 4. Teaching methods:

Lectures, auditory exercises, laboratory exercises, consultations.

Pre-examination obligations Mandatory Points					Final ex	xam Mandatory		Points
Laboratory exercise attendance Yes 5.00 Written part of					Written part of the exam	- tasks and theory	Yes	30.00
Laborat	ory exercise defence		Yes	30.00				
Lecture	attendance		Yes	5.00				
Project			Yes	30.00				
Literature								
Ord.	Author			Title	•	Publisher		Year
1,	J. P., S. MacKay		cal Data Acqu ol Systems	uisition for	Instrumentation and	Newnes		2003
2,	Robert Ashby	Design	ners Guide to	the Cypro	ess PSoC	Newnes		2005
3,	3, Steven F. Barrett, Daniel J. Microcontrollers Fundamentals for Engineers and Scientists				als for Engineers and	Morgan & Claypool		2006
4,	K. James	PC Interfacing and Data Acquisition: Techniques fo Measurement, Instrumentation and Control				Newnes		2000
5, N. V. Kirianaki Data Acquisition and Signal F			Processing for Smart	J. Wiley		2002		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EIEKI		Electronic Components in Instrumentation							
Number of ECTS:	6									
Teachers:	eachers: Milovančev S. Slobodan, Pejić V. Dragan, Tomić J. Josif									
Course status:		Elective								
Number of active teac	hing classe	es (weekly	r)							
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:					
2	C	)	2	0	0					
Precondition courses			None							

## 1. Educational goal:

Acquiring basic knowledge in the field of elements of electronic measurement devices.

## 2. Educational outcomes (acquired knowledge):

Introduction to the real elements of the electronic measurement devices. Ability to design electronic measurement devices considering parasitic effects and imperfections of components used.

## 3. Course content/structure:

Model of real components of electronic measurement devices. Resistor. Capacitor. Coil. Transformer. Electromechanical components. Piezoelectric devices. Electrical contacts, switches and connectors. The real characteristics of elements with P-N junction – diodes and transistors. Fundamemntal parameters of basic active electronic components: operational amplifier, comparator, voltage regulator, A/D and D/A converters. Printed circuit board. Hidden scheme. Parasitic effects and their impact on the quality of measurements. Production technology of electronic and microelectronic components. Reliability of electronic and microelectronic elements and circuits. Special purpose devices (thyristors, LEDs, photodiodes, Hall&Hall elements, tunnel and Zener diodes, HEMT, MODFET, semiconductor lasers).

## 4. Teaching methods:

Lectures. Laboratory Practice.

Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations	Mandatory	Final e	xam	Mandatory	Points					
Laboratory exercise defence Yes 30.00 Written part of the exa						- tasks and theory	Yes	40.00			
	Oral part of the exam Yes 30.										
	Literature										
Ord.	Author			Title	;	Publisher		Year			
1,	D. Tjapkin, S. Širbegović, S. Ristić, R. Ramović	Kompo	onente i kons	truisanje e	elektronskih uređaja	Nauka, Beograd		1992			
2,	Delton Horn		Electronic Components: A Complete Reference for Project Builders			McGraw-Hill/TAB Electronics		1991			
3,	Paul Horowitz, Winfield Hill	The Ar	The Art of electronics, 2nd edition Cambridge University					1989			



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:										
Course id:	EIMNV		Measurements of non-electrical quantities							
Number of ECTS:	7									
Teachers: Milovančev S. Slobodan, Vujičić V. Vladimir, Župunski Ž. Ivan										
Course status:		Elective	Elective							
Number of active tead	ching classe	es (weekly	')							
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:					
3	0		2	0	1					
Precondition courses			None							

## 1. Educational goal:

Acquiring knowledge about active and passive transducers and circuits for measurement of non-electrical quantities. Gaining knowledge about the dynamics, span and timing of non-electrical quantities in industry and biomedical measurements. Training for proper selection of existing and design of dedicated transducers for sensors of non-electrical quantities.

## 2. Educational outcomes (acquired knowledge):

Understanding of functioning and application of transducers for measurement of various non-electrical quantities; work with specific measurement circuits that can adapt to a variety of sensors, amplifiers, auxiliary power supplies and matched output instruments; the ability to work in interdisciplinary teams to solve problems in mechanics, mechanical engineering, chemistry, medicine and other science; the ability to search the literature and development of individual transducers.

#### 3. Course content/structure:

General on measurement of non-electrical quantities, measuring chain, accuracy of transducers; division of transducers, technical parameters and characteristics. Measurement circuits for different transducers, measuring amplifiers, auxiliary power sources, matching of the output instruments, strain gauges, analysis of simple and complex mechanical stress, measurement of force, pressure, torque and standing waves, measurement of temperature with thermocouples and various resistive transducers, cold point compensation, two-wire and three-wire connection with the rest of the measuring bridge, pyrometers, integrated temperature gauges; Analysis of gas mixtures, the measurement of the oxygen, hydrogen, carbon monoxide and carbon dioxide, environmental problems, inductive and capacitive gauges, measuring of displacement, eccentricity of the shaft, small thickness, differential pressure. Measurement of chemical quantities, pH value, electrolytic conductivity, measurement of humidity and moisture of air, grain, wood. Measurement of flow, mass and volume flow, anemometers (hot wire, Doppler, laser), turbine meter. Measurement of vibration, sound and noise, piezoelectric transducers, inductive meters, vibrating strings. Measurement of light quantities, photo cells, photoelement, photo diode, photo resistor, measuring of the luminous flux and brightness, film thickness measurement, rPM measurement. Measurement of parameters of radiation, counters, dosimeters, photomultiplicators, scintillation counter application in medicine.

## 4. Teaching methods:

Lectures, auditory practice, laboratory practice, consultations, development and fabrication of transducer.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points		
Laborat	tory exercise defence	Written part of the exam	- tasks and theory	Yes	40.00					
	Oral part of the exam									
Literature										
Ord.	Author	Title			Publisher		Year			
1,	Milovančev Slobodan	Zbirka veličin		električnih	merenja neelektričnih	FTN Novi Sad		2001		
2,	Stanković Dragan	Fizičko	o tehnička me	erenja		Tehnička knjiga Bed	ograd	2003		
3,	Neubert Hermann	Instrur	ment Trransdi	ucers		Claredon Press Oxf	ord	1975		
4,	L.F.Adams	Engineering Measurements and Instrumentation			and Instrumentation	The English Universities Press		1975		
5,	Benedict Robert		Fundamentals of Temperature, Pressure and Flow Measurements  John Wiley & Sons, Ne					1972		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:			D: 11 1 1 1 1 1 1						
Course id:	EM305A		Digital Microcontrollers						
Number of ECTS:	6								
Teachers: Malbaša D. Veljko, Mezei D. Ivan									
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes: Other teaching types:		Study research work:	Other classes:				
2	(	)	2	0	0				

## Precondition courses

## 1. Educational goal:

Enabling students to design hardware and programme support to industrial microcomputer systems for implementation into other technical systems based on the given specifications.

## 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will be able:

- -to analyze specification and hardware of the given microcomputer system for the implementation into other technical systems and to understand the interaction between the system and its surrounding and the interaction between hardware and programme support of embedded systems.
- to design, simulate and implement hardware of the microcomputer system for the implementation into other technical systems.
- to apply contemporary methods of modeling, design, testing and implementation of programme support to embedded microcomputer systems.
- to apply contemporary software tools in design and implementation of programme support to the embedded microcomputer systems.
- to design programme support of embedded microcomputer system for real-time work based on the given specifications.

#### 3. Course content/structure:

Structure of the contemporary microcontrollers. Structure of the microcomputer systems based on the microcontrollers and designed for the implementation into other technical embedded systems. Interaction between embedded microcomputer systems and the surrounding. Real-time operation. Structure of the programme support of embedded microcomputer systems. Design of the application programmes for the real-time operation of embedded systems. Design of the system support for the real-time operation. Integration and testing of the embedded systems in real-time. Application of software tools in design, simulation, testing and implementation of programme support of embedded microcomputer systems based on microcontrollers.

## 4. Teaching methods:

Lectures; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Laboratory exercise defence	Yes	20.00	Practical part of the exam - tasks	Yes	50.00					
Test	Yes	10.00								
Test	Yes	10.00								
Test	Yes	10.00								
		1.34								

#### Literature Ord Author Title Publisher Year R. Grehan, R. Moote, I. 1, Real Time Programming Addison Wesley 1998 Cyliax Uputstvo za laboratorijske vežbe iz predmeta Digitalni 2, M. Nikolić, K. Babković 2008 mikrokontroleri (skripta)

## LAST STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EMSAU1		Automatic Control Systems in Electronics							
Number of ECTS:	6									
Teachers: Čongradac D. Velimir, Kulić J. Filip, Petrovački Lj. Nebojša										
Course status:		Elective								
Number of active tead	hing classe	es (weekly	')							
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:					
3	2		1	0	0					
Precondition courses			None							

#### 1. Educational goal:

Introducing students to the theoretical and practical basis of analysis and synthesis of the automatic control system.

## 2. Educational outcomes (acquired knowledge):

Acquired knowledge can be used in solving specific engineering problems, and also represent the basis for further understanding of professional courses.

## 3. Course content/structure:

Basic notions and principles of automatic control systems. Mathematical description of continual linear and non linear systems. Laplace transform. Block diagram models. Signal flow graph models. Quality evaluation and of control in stationary and transition regime. Analysis of system stability using analytical methods. Root locus. Analysis and syntheses of system in frequency domain. Nyquist stability criteria, Bode method, Concept of space of system state. Choice and adjusting of parameters of industrial regulators. PID regulators, Elements of digital control systems. Introduction to computer application in control.

## 4. Teaching methods:

Lectures; Computing (N), Laboratory (L), Computer (C) and Computer-Laboratory (CL) Practice; Consultations. Part of the course which represents a logical whole can be passed in the form of colloquium. Colloquium and the examination are oral and written. Colloquium and the written part of the examination are taken in the written from, while oral part of the examination is oral. Course grade is formed based on the success in test, computer-laboratory practice and written and oral part of the examination.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations Mandatory P			Points	Final exam		Mandatory	Points		
Laborat	ory exercise attendance		No	10.00	Oral part of the exam		Yes	20.00	
Test			Yes	40.00	Practical part of the exan	n - tasks	Yes	40.00	
Literature									
Ord.	Author		Title			Publisher		Year	
1,	M. Stojić	Kontinualni sistemi automatskog upravljanja				Naučna knjiga, Beograd		1996	
2,	. B.Kovačević, Ž.Đurović	Sistem zadata		g upravlja	anja -zbornik rešenih	Nauka, Beograd		1995	
3,	D. Kukolj i ostali		e klasične teo primere	orije autor	matskog upravljanja kroz	Somel, Sombor		1995	
4,	D. Kukolj, F. Kulić		Projektovanje sistema automatskog upravljanja u prostoru stania			Univerzitet u Novom Sadu, Novi Sad		1995	
5,	Richard C. Dorf; Robert H. Bishop	Modern Control Systems			Addison-Wesley		1998		

## TAS STUDIO

## UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			Real Time System Programming 1							
Course id:	E23A2									
Number of ECTS:	6									
Teacher:		Popović V. Miroslav								
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:					
3	(	)	3	0	0					
Precondition courses			None							

## 1. Educational goal:

Teaching students parallel programming of multicore processors and design of software tools for real time systems.

2. Educational outcomes (acquired knowledge):

Ability to write parallel programs for multicore processors by using parallel programming patterns, models, and tools, and designing software tools for real-time systems, including assembler, macro assembler, compiler, etc.

3. Course content/structure:

Introduction. Part 1: Parallel Programming (Program analysis, Parallel programming design patterns, Parallel programming models, Parallel programming tools). Part 2: Software tools design (Assembler, Macro assembler, Formal systems, Compiler, Loader, Integrated development environment, Highly optimizing compilers, Linker, Compactor, Simulator, Debugger).

## 4. Teaching methods:

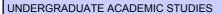
Lectures, tutorials, computer practice classes, consultations.

During the semester students complete laboratory practice tasks

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations		Mandatory	Points	Final ex	cam	Mandatory	Points			
ory exercise defence		Yes	70.00	Theoretical part of the ex	Yes	30.00				
Literature										
Author			Title	;	Publisher		Year			
V. Kovačević i M. Popović	Sistemska programska podrška u realnom vremenu 1. Programski alati i paralelno programiranje				FTN Izdavaštvo, Novi Sad		2011			
	Author	Pre-examination obligations ory exercise defence  Author  V Kovačević i M Popović Sistem	Pre-examination obligations Mandatory ory exercise defence Yes  Author  V Kovačević i M Popović Sistemska program	Pre-examination obligations Ory exercise defence  Author  Author  Mandatory Points 70.00  Liter  Author  Sistemska programska podrš	Pre-examination obligations Mandatory Points Final expressions are defence Yes 70.00 Theoretical part of the examination obligations Yes 70.00 Theoretical part of the examination obligations Title  Author Title  V Kovačević i M Popović Sistemska programska podrška u realnom vremenu 1:	Pre-examination obligations Mandatory Points Final exam  ory exercise defence Yes 70.00 Theoretical part of the exam  Literature  Author Title Publishe  V Kovačević i M Popović Sistemska programska podrška u realnom vremenu 1: ETN Izdavaštvo. No	Pre-examination obligations Mandatory Points Final exam Mandatory ory exercise defence Yes 70.00 Theoretical part of the exam Yes  Literature  Author Title Publisher  V Kovačević i M Popović Sistemska programska podrška u realnom vremenu 1: ETN Izdavaštvo, Novi Sad			

## SITAS STUD UNIVERSITY OF NOVI SAD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:											
Course id:	EK313	1	Computer Communication								
Number of ECTS:	6										
Teacher:		Bajić D. [	Bajić D. Dragana								
Course status:		Elective									
Number of active tea	ching classe	es (weekly	)		_						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
3		2	1	0	0						
Precondition courses			None								

## 1. Educational goal:

Acquiring basic knowledge about standard methods of data transfer and linking the theoretical background in this field with specific solutions applied in practice.

## 2. Educational outcomes (acquired knowledge):

Good knowledge of the principles of communication protocol functioning by OSI reference mode, as well as the practical version of protocols implemented in LAN and WAN networks, with an emphasis on the TCP/IP protocols (Internet).

## 3. Course content/structure:

- -Introduction. Analog and digital transfer. Transfer medium.
- -Asynchronous and synchronous transmission.
- -OSI reference model.
- -Physical level: RS-232. a mode and DSL transmission.
- -Data level: the error control and flow control: ARQ mechanisms.
- Packet-switched networks. Routing. Routing protocols: RIP, OSPF, BGP. Convection control. LAN/MAN technologies.

MAC protocols: IEEE 802.3, WLAN.LAN topologies and devices. Hub, switch, router. TCP/IP protocol stack. IP protocol.

- Transport layer protocols TCP, UDP
- -Network applications (HTTP, e-mail, VoIP...).
- Cryptography and protection of computer networks.

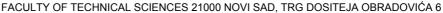
## 4. Teaching methods:

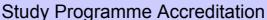
Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points			
Project	Project task			30.00	Written part of the exam	- tasks and theory	Yes	70.00			
	Literature										
Ord.	Author			Title		Publisher		Year			
1,	A. Tanenbaum: A. Tanenbaum	Comp	uter Networks	3		4th Edition, Prentice Hall		2003			
2,	Alberto-Leon Garcia, Indira Widjaja	Comm	nunication Ne	tworks		2nd. Edition, McGra	ıw-Hill	2000			
3,	Douglas Comer		etworking with			prevod na srpski, C Biblioteka	ET	2002			
4,	Endru S. Tanenbaum		Računarske mreže, prevod četvrtog izdanja (Tanenbaum)			Mikroknjiiga, ISBN: 265-3	86-7555-	2005			

Strana 93 Datum: 18.12.2012

## STAS STUD UNIVERSITY OF NOVI SAD







Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:		_						
Course id: EM421 Characterization and Testing of Microelectronic Circuits								
Number of ECTS: 6								
Teacher:		Stojanović M. Goran						
Course status:		Elective						
Number of active teac	hing classe	s (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	0		2	0	0			

## Precondition courses

## 1. Educational goal:

Acquiring practical knowledge in the field of characterization and testing of microelectronic circuits, experiments with measurement instruments in the field of microelectronics.

- 2. Educational outcomes (acquired knowledge):
- ability to record characteristics of semi-conductor components using the curve tracers
- ability to practically test passive components (resistors, capacitors, inductors)
- ability to measure s/z/y-parameters, microelectronic components using the Vector Network Analyzer
- ability to monitor special effects on silicon wafer using the Wafer Probe Station

#### 3. Course content/structure:

Introduction. Methods for testing microelectronic components and circuits. Recording characteristics of semi-conductor components (diodes, Zener diodes, transistors, MOSFET). Practical work with the tracer Tektronix Curve Tracer (type 576). Characterization and testing of passive components (resistors, capacitors, inductors). Practical work with HP 4277A LCZ meter. Measurement of s/z/y parameters, measurement of Q-factor, measurement of reflection/transmission coefficient. Practical work with the Vector Network Analyzer Agilent E5071B. Measurement on wafer. Practical work with Wafer Probe Station. Monitoring special effects on the chip using a microscope.

## 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points					Final ex	kam	Mandatory	Points	
Laborat	ory exercise defence		Yes	Coloquium exam		Yes	20.00		
	Oral part of the exam							40.00	
	Literature								
Ord.	Author			Title		Publisher		Year	
1,	Goran Stojanović, Duka Ljubiša	Karakterizacija i testiranje elektronskih komponenti korišćenjem trasera krivih i LCZ metra - skripta FTN, Novi Sad						2005	
2,	User manual	Type 576 Curve Tracer				Tektronix, Inc.		1987	
3,	User manual	4277A	LCZ Meter			HEWLETT PACKAR	RD	1986	

Strana 94 Datum: 18.12.2012

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation





Engineering

## Table 5.2 Course specification

Course:										
Course id:	BMI107	Materials and fabrication technologies in medical devices								
Number of ECTS:	5									
Teachers: Živanov D. Ljiljana, Crnojević-Bengin B. Vesna, Stojanović M. Goran										
Course status: Elective										
Number of active tead	Number of active teaching classes (weekly)									
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	(	0 2 0 1								
Precondition courses			None							

#### 1. Educational goal:

Students will be qualified to understand properties of often used materials in biomedicine as well as application of these materials in modern medical devices.

- 2. Educational outcomes (acquired knowledge):
- understanding properties and application areas of most often used materials in biomedicine
- an ability to apply bioceramics, artificial materials, composites, etc. in medicine and stomatology
- an ability to manufacture components and systems based on biomaterials using LTCC technology
- an ability to manufacture flexible electronic components applying organic and nonorganic materials

#### 3. Course content/structure:

- division (conventional) of electronic materials and their properties - fundamentals of artificial electromagnetic materials and their application in medicine - overview of materials important for the biomedicine field - bioceramics (barium-titanate for ultrasound probes, ferrites for suppression of noises in medical devices, superconductive magnets for application in magnetic resonance imaging) biomedical composites - biopolymers (teflon as an isolated material for probes in medicine, polymeric wireless implants for measuring blood sugar) - biomaterials for cardiovascular applications (Ag/AgCl for electrodes) - biomaterials for dental application - biomaterials for orthopedic application - biomaterials for tissue reparation - overview of available fabrication technologies and comparison of characteristics and application possibilities - LTCC technology for manufacturing sensors in biomedicine, lab-on-chip, etc. - PCB technology and softwares for design circuits for PCB - technologies which can use flexible substrates (ink-jet technology for realization of various implantable sensors)

## 4. Teaching methods:

Lectures. Auditory exercises. Laboratory exercises. Consultations. Experimental projects.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory Points Final exam									
Project	Project Yes 30.00 Final exam - part one							35.00		
Final exam - part two Yes										
Literature										
Ord.	Author			Title	;	Publisher		Year		
1,	Goran Stojanović, Ljiljana Živanov	Materij	jali u elektrote	ehnici		FTN izdavaštvo		2007		
2,	H. L. Kwok	Electronic materials PWS Publishing Com						1997		
3,	Rolf E. Hummel	Electro	nic Propertie	es of Mate	Springer, 3rd edition		2001			
4,	Lj. Živanov, G. Stojanović, A. Marić, G. Radosavljević	Materij	jali u elektrote	ehnici, zbi	Univerzitet u Novon Fakultet tehničkih n		2007			

Strana 95 Datum: 18.12.2012

# ASTRAS STUDIOS STUDIOS

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	E239A		Web Programming							
Number of ECTS:	6									
Teachers:		Sladić S. Goran, Vidaković P. Milan								
Course status: Elective										
Number of active tead	Number of active teaching classes (weekly)									
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	0 2 0 1								
Precondition courses			None							

## 1. Educational goal:

Students learn to solve problems in the field of Web programming, which covers knowledge of HTTP protocols, Server and JSP technology as well As organization and architecture of web applications.

2. Educational outcomes (acquired knowledge):

The acquired knowledge forms the basis for the future engineering courses.

#### 3. Course content/structure:

Fundamentals of HTML. Fundamentals of JAVA programming language. Input/output subsystem. Concurrent programming. Network programming. Client – server architecture. HTTP protocol fundamentals. Fundamentals of servlet technology. Session management. POST method and file upload. JSP basics. JSP expressions. JSP scriptlets. JSP declarations. JSP directives. JavaBeans. Component visibility.

## 4. Teaching methods:

Lectures. Computer practice. Consultations. Theoretical part of the course if examined orally. Practical part of the examination is taken in the computer laboratory.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory Points Final exam			kam	Mandatory	Points		
Project	Project			50.00	Oral part of the exam		Yes	50.00		
Literature										
Ord.	Author			Title	;	Publisher		Year		
1,	B. Milosavljević, M. Vidaković	Java i	Internet prog	ramiranje		Grupa za informacio tehnologije, Novi Sa		2002		
2,	B. Eckel	Misliti	na Javi			Mikro knjiga, Beogra	ad	2002		
3,	C. Horstmann, G. Cornell	Core J	ava 2V			Sun Microsystems I Santa Clara	Press,	2005		
4,	Danilo Obradović	Osnovi računarstva				Stylos		2003		

## FACULT

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	H311	Application of Sensors and Actuators							
Number of ECTS:	6								
Teachers:		Nađ F. L	aslo, Živanov D. Ljiljana, Stanl	kovski V. Stevan					
Course status:		Elective							
Number of active tead	Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2 0			2	0	1				
Precondition courses			None						

#### 1. Educational goal:

Acquiring basic knowledge in the field of sensors and actuators and their application in industry and mechatronics.

- 2. Educational outcomes (acquired knowledge):
- Understanding the basic principles of various sensors and actuators, applicable in electronic control circuits in industry and mechatronics Ability to understand and interpret technical properties and the right selections of sensors and actuators from the manufacturer manuals
- for the specific application in industry and mechatronics.
  -Ability to install and successfully apply sensors or actuators in some industrial process
- Ability to design electronic circuits for signal processing of simple sensors (pressure, temperature or flow rate...)
- Ability to design electronic circuits for excitation and management of simple actuators (motors, valves...)

## 3. Course content/structure:

Measurement principles and sensor and actuator techniques. Technical properties of sensors and actuators. Methods of sensor and actuator classification. Types of sensors. Sensor application (sensors of linear and angular displacement, speed sensors, accelerometers, force and torque; pressure sensors, level and flow; sensors for measuring temperature and humidity, proximity sensors, tactile sensors). Vision sensors. Types of actuators (electromechanical, hydraulic, pneumatic) and their applications (light modulators and detectors; flow controllers, switches, valves, motors, electromagnets). Packaging (housing). Modern integrated micro-actuators (positioners, optical elements).

## 4. Teaching methods:

Lectures. Laboratory Practice. Consultations. The student can take a colloquium from parts of the course which represent a logical whole (sensors, actuators). He/she can do a detailed project in sensor and/or actuator application within some electronic or mechatronic device. In that case, the final examination consists of the oral project defense and answers to theoretical questions.

Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations	Mandatory Points Final exam			Mandatory	Points					
Laborat	tory exercise defence	Yes	30.00	Written part of the exam	- tasks and theory	Yes	70.00				
	Coloquium exam										
	Literature										
Ord.	Author			Title	•	Publisher		Year			
1,	M.Popović	Senzo	ri i merenja		VEŠ, Beograd		1995				
2,	M.Popović	Senzori u robotici VEŠ, Beograd						1994			
3,	D. Shetty, R. A. Kolk	Mecha	Mechatronics System Design PWS					1997			
4,	Ljiljana Živanov, Laslo Nađ	Prime	Primena senzora i aktuatora Skripta, Fakuzltet tel nauka					2009			

# TO STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:		Selected Chapters in Physical Architecture Design					
Course id:	<b>Ξ244</b>						
Number of ECTS: 6	5						
Teachers:	Teslić Đ	Teslić Đ. Nikola, Pjevalica U. Nebojša					
Course status:	Elective	Elective					
Number of active teach	ning classes (weekl	<i>(</i> )					
Lectures:	Practical classes:	classes: Other teaching types: Study research work: Other cl					
3	0	2	0	1			

#### Precondition courses

#### 1. Educational goal:

Students will be able to design, realize and test complex digital systems by learning about selected chapeters in physical architecture design.

#### 2. Educational outcomes (acquired knowledge):

Ability to design, realize and test physical architecture of complex digital systems.

#### 3. Course content/structure:

Introduction to the architecture of computer system (specific characteristics of computer system design, computer system components – classification, basic properties, catalogue data, types of cases, choice and procurement). Signal extension, time relations and temeperature aspects in computer systems (problems of reflexion, tact distribution, power supply distribution, wave forms, interference reduction methods. Printed boards (basic notions, component mounting, cooling, recommendations for printed boards with high frequency tact). Connection circuits in computer systems (standards, components, application of programmable sequential networks). Some aspects of designing complex computer systemsand typical problems (multi-access memories, speed converters and level converters). Problems of real time system software (device handlers). Basic techniques for studying physical architecture of computer systems. Problems in power supply of computer systems (mains adapter, switch converters, linear regulators, chemical sources, multiple source supply, calculation of computer system supply).

#### 4. Teaching methods:

Lectures. Tutorials. Computer practice. Consultations.

The teaching is divided into two blocks. In the first block students attend theoretical classes during the mornings. In the afternoon they attend computer practice classes. During the second block students work on their examination papers.

' '			· ·					
Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Homework	Yes	5.00	Coloquium exam	No	20.00			
Homework	Yes	5.00	Coloquium exam	No	20.00			
Homework	Yes	5.00	Theoretical part of the exam	Yes	30.00			
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	40.00			
Test	Yes	10.00						

	Literature						
Ord.	Author	Title	Publisher	Year			
1,	V. Kovačević, Z. Krajačević	Odabrana poglavlja projektovanja fizičke arhitekture, skripte		2005			

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering

Springer



2009

2012

#### Table 5.2 Course specification

Course:								
Course id:	E2315		Electrical Machines in Automatic Control Systems					
Number of ECTS:	6							
Teachers:		Oros V. f	Pros V. Đura, Kulić J. Filip					
Course status:		Elective	Elective					
Number of active tead	hing classe	es (weekly	')					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	(	)	2 0 1					
Precondition courses			None					

#### 1. Educational goal:

Students gain knowledge about the basic principles of electric machines that are used in systems of automatic control

#### 2. Educational outcomes (acquired knowledge):

The acquired knowledge is used in the solution of specific engineering problems such as the design of control systems, implementation and maintenance.

#### 3. Course content/structure:

Firoozian, Riazollah

grupa autora

basics of electromechanical conversion and principles of operation of rotating electrical machines. Three-phase systems. DC motors, AC motors (induction, single-phase and three-phase), a permanent magnet motor, stepper and servo motors. Feeding of motors from the source with variable voltage and frequency.

#### 4. Teaching methods:

Lectures, calculation, computer and laboratory practice, consultations. The exam is written and oral with the written part being the prerequisite for the oral. The final grade is formed on the bases of the colloquium, homework assignments and the written and oral part of the exam.

Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations		Mandatory	Points	Final exam		Mandatory	Points		
Homework		Yes	10.00	Theoretical part of the exam		Yes	30.00			
Test	Test		Yes	10.00	Practical part of the exam - tasks		Yes	40.00		
Test		Yes	10.00	-						
	Literature									
Ord.	Author		Title			Publishe	er	Year		
1,	Theodor Wildy	ELEC' SYST		HINES, C	PRIVES, AND POWER			2006		

Servo Motors and Industrial Control Theory

Skripte za predmet

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:								
Course id:	EE0400		Electrical Substations 1					
Number of ECTS:	7							
Teacher:		Salamon D. Dragutin						
Course status:		Elective						
Number of active tead	hing classe	s (weekly	<b>'</b> )					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	0	)	3	0	0			

#### Precondition courses

#### 1. Educational goal:

The course objective is introduction to the place and role of electrical substations in the power system, calculation of short circuit current and values necessary for dimensioning of plant elements and their basic characteristics. Introduction to principle schemes of electrical substations and their selection, as well as the role of grounding and its dimensioning.

#### 2. Educational outcomes (acquired knowledge):

Knowledge of methods for calculation of short circuit current. Knowledge of ways of equipment dimensioning in electrical substations. Knowledge of the principles of designing of electrical substations up to the level of concept design.

#### 3. Course content/structure:

Calculation of short circuit current and their characteristic values. Dimensioning of electrical substations elements and their selection. Principle schemes and disposition of electrical substations. Dimensioning of grounding.

#### 4. Teaching methods:

Lectures. Auditory practice. Computer practice classes are performed according to the assignment for the electrical substations project and in the end a report which is awarded grade is handed in.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	40.00			
Exercise attendance	Yes	5.00	Oral part of the exam	Yes	30.00			
Term paper	Yes	20.00		,				

Litoroturo

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	J. Nahman, V. Mijailović	Visokonaponska postrojenja	Beopres	2000				
2,	H. Požar	Rasklopna postrojenja	Školska knjiga, Zagreb	1984				
3,	Lj. Gerić, P. Đapić	Razvodna postrojenja, zbirka zadataka	FTN	2006				
4,	J. Nahman	Struje kratkih spojeva u elektroenergetskim sistemima	ETF – Nauka, Beograd	1996				
	-		-					

# RESTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EE401		Electric Machines 3						
Number of ECTS:	6								
Teacher:		Vasić V.	/asić V. Veran						
Course status:		Elective	Elective						
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	2	2	1 0 0						
Precondition courses			None						

#### 1. Educational goal:

Acquiring basic knowledge in the field of electromechanical energy conversion, electric machines, power devices, electronics and electrical drives.

- 2. Educational outcomes (acquired knowledge):
- ability to understand basic principles of electromechanical energy conversion -ability to understand basic properties and operation methods of rotary machines
- Course content/structure

Rotating magnetic field. Asynchronous machines: parts and construction, operating principles, applications, characteristics, ignition, speed control. Single-phase asynchronous motors: parts and construction, application, characteristics. Transients in transformers.

#### 4. Teaching methods:

The course consists of lectures and practice. In lectures, contemporary illustrations for intuitive understanding of the taught matter are used. In order to completely master the taught matter, problems are solved in practice, which helps students to independently solve problems from engineering practice. Part of the practice is carried out in the laboratory.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00			
Lecture attendance	Yes	5.00	Coloquium exam	Yes	20.00			
Test	Yes	20.00	Coloquium exam	Yes	20.00			
Literature								

	Literature						
Ord.	Ord. Author Title		Publisher	Year			
1,	Vladan Vučković	Opšta teorija električnih mašina	Nauka Beograd	1992			
2,	Ion Boldea, S.A.Nasar	Electric drives	CRC Press, New York	1999			
3,	I. Boldea, S. Naser	The Induction Machine Handbook	CRC Pres	2002			

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:								
Course id:	EIMET		Metrology					
Number of ECTS:	5							
Teacher:		Spasić-J	Spasić-Jokić M. Vesna					
Course status:		Elective						
Number of active tead	hing classe	es (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	3	3	0 0 0					
Precondition courses			None					

#### 1. Educational goal:

Acquiring knowledge in the field of metrology.

2. Educational outcomes (acquired knowledge):

The ability for independent problem solving in the field of metrology. Becoming familiar with the theory, applications and regulations related to the field of metrology.

3. Course content/structure:

Theoretical metrology. Measuring quantities and units systems. General measurement methods. Errors theory. Measurement uncertainty. Measurement result processing. Industrial metrology. Applied metrology. Legal metrology. Conformity assessment. Uniformity of measurements. Metrological assurance. Fields of legal metrology. Legal metrology infrastructure.

4. Teaching methods:

Lectures. Practice classes.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory Points Final exam Mandatory							Points			
Project	Project			50.00	Written part of the exam	- tasks and theory	Yes	30.00			
Oral part of the exam Yes											
	Literature										
Ord.	Author			Title	•	Publishe	r	Year			
1,	I. Bagarić	Metrol instrur		nih veličin	a merenja i merni	Nauka Beograd		1996			
2,	P. Pravica i I. Bagarić	Metrologija električnih veličina opšti deo Nauka Beograd					1993				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			Development Tools in Telecommunications and Signal Processing 2				
Course id:	EK450						
Number of ECTS:	5						
Teacher:		Lončar-T	urukalo G. Tatjana				
Course status:		Elective	Elective				
Number of active tead	ching classe	es (weekly	′)				
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:		
2	(	)	2	0	0		
Precondition courses			None				

#### 1. Educational goal:

Acquisition of basic knowledge about the nature and management of distributed processes in mobile phone networks, wireless sensor networks, LAN, WAN and WLAN networks. Identification and resolving the problems of realization of robust and flexible distributed applications and network protocols for its support.

#### 2. Educational outcomes (acquired knowledge):

The full understanding and consideration of the issues of scalability, security, and management of communications and computer networks as distributed systems. The ability to implement distributed applications in the network environment.

#### 3. Course content/structure:

Development of protocols and systems architecture necessary to implement scalable, functional, and easily manageable network Messaging in the wireless and WAN environments, solutions for routing, multicast and reliable transmission in networks that are rapidly changing the structure, availability and bandwidth availability. Solutions for timely and reliable delivery of services in real time Security principles: analysis of possible threats, access control (authentication and authorization), the principles of authorization (access rules, public key cryptography, digital signature) The basic conceptual solutions will be illustrated by practical examples.

#### 4. Teaching methods:

Lectures, computer excercises

	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations			Mandatory	Points	Final ex	kam	Mandatory	Points			
Computer excersise defence			Yes	Yes 20.00 Practical part of the exam - tasks Yes 30				30.00			
Project	Project Yes 50.00										
	Literature										
Ord Author			Title		Publishe	ar	Vear				

		Literature		
Ord.	Author	Title	Publisher	Year
1,	D. Bertsekas, R. Gallager	Data Networks (http://web.mit.edu/dimitrib/www/datanets.html)	Prentice Hall	1992
2,	Sudip Misra, Subhas Chandra Misra, Isaac Woungang	Selected Topics in Communication Networks and Distributed Systems	World Scientific	2010
3,	A. S. Tanenbaum, M. van Steen	Distributed systems: principles and paradigms	Perason Prentice Hall	2007



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:									
Course id:	EE418		Electric Motor Drives						
Number of ECTS:	4								
Teacher:		Jeftenić I	. Borislav						
Course status:		Elective	Elective						
Number of active tead	ching classe	es (weekly	<b>'</b> )						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	2	2	0	0	0				
Precondition courses			None						

#### 1. Educational goal:

The aims of the course are: 1. To understand the basic concepts of an electric motor drives. 2. To provide a general approach to an understanding of the performance and control techniques of various electric motor drive systems. 2. To understand characteristics and operating principle of power converters for feeding electric motor drives.

#### 2. Educational outcomes (acquired knowledge):

Upon successful completion of this course, students will be able to: 1. Recognize the structure of electric drive systems in various applications. 2. Analyze systems with electric drives. 3. Analyze the performance of electrical machines in different modes of operation. 4. Evaluate the power and torque requirements placed by mechanical systems on electric drives. 5. Specify appropriate power electronic converters in drive applications. 6. Solve various electric motor drive problems.

#### 3. Course content/structure:

Introduction. Classification of electric motor drives. Basic elements of an electric motor drives. Static and dynamic conditions of a drive system. Stability considerations of electrical drive. Selection of drive motors with regard to load conditions. D.C. motor drives: separately excited D.C. motor and series D.C. motor. Mathematical model of D.C. motor drives, mechanical characteristics, transient analysis, equivalent circuits. Speed control of separately excited D.C. and series motors. Armature and field control. Breaking of D.C. motors. A general survey of converters for feeding D.C. motor drives. Induction motor drives. Mathematical modeling of induction motor drives, mechanical characteristics, transient analysis, equivalent circuit. Speed control of induction motors. V/f controlled induction motors, PWM inverter drives - VSI & CSI fed motors, field oriented control, direct torque control. Breaking of induction motor drives. A general survey of converters for feeding induction motor drives. Applications of electrical drive technologies used in industrial systems: Hoists, elevators, presses and crushers, conveyor belts, electric traction systems, fans, pumps and compressors.

#### 4. Teaching methods:

Lectures, Exercises.

Mandatory				Knowledge evaluation (maximum 100 points)										
Managery	Points	Final exam	Mandatory	Points										
Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00										
Yes	5.00													
Yes	5.00													
Yes	5.00													
Yes	5.00													
Yes	5.00													
	Yes Yes Yes Yes Yes Yes	Yes 5.00 Yes 5.00 Yes 5.00 Yes 5.00 Yes 5.00 Yes 5.00	Yes         5.00         Written part of the exam - tasks and theory           Yes         5.00           Yes         5.00           Yes         5.00           Yes         5.00	Yes         5.00         Written part of the exam - tasks and theory         Yes           Yes         5.00           Yes         5.00           Yes         5.00           Yes         5.00										

		Literature		
Ord.	Author	Title	Publisher	Year
1,	V. Vučković	Električni pogoni	Akademska misao, Beograd	2002
2,	B. Jeftenić, M. Bebić, N. Mitrović, Đ. Oros, M. Petronije	Elektromotorni pogoni - zbirka rešenih zadataka	Akademska misao, Beograd	2003

# ACTIAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:				E: 10 (f) 14					
Course id:	EJE5		English Language – First Certificat 1						
Number of ECTS:	2								
Teachers:		Bogdano F. Jelisa		a, Katić M. Marina, Ličen S. Branislava, Mi	rović Đ. Ivana, Šafranj				
Course status:		Elective							
Number of active tea	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	(	)	0	0	0				
B ""									

#### Precondition courses

#### 1. Educational goal:

Mastering the development of all language skills at the B2 level of the Common European Framework of Reference for Languages within this course.

#### 2. Educational outcomes (acquired knowledge):

Students have the knowledge of reading, writing, listening and speaking at the level that approximates the B2 level of the Common European Framework of Reference for Languages. They possess a wide vocabulary related to the course topics and they use it properly. They are confident in using grammar at this level.

#### 3. Course content/structure:

Grammar is covered by literature for this course at the B2 level of the Common European Framework of Reference for Languages. The vocabulary related to the topics covered by the literature. Developing all language skills at this level within the course literature (the first part of the textbook).

#### 4. Teaching methods:

The emphasis is placed on the student activities during the class, their interaction with the teacher and between themselves. The communicative approach is used in the foreign language lectures.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Test	Yes	10.00	Written part of the exam - tasks and theory	Yes	40.00					
Test	Yes	10.00	Oral part of the exam	Yes	30.00					
Test	Yes	10.00								

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Simon Haines and Barbara Stewart	First Certificate Masterclass (Units 1- 6)	Oxford University Press	2000						
2,	Simon Haines and Barbara Stewart	First Certificate Language Practice	Oxford University Press	2000						
3,	Grupa autora	Oxford English - Serbian Dictionary	OUP	2006						

# TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			Application of Computers in Power Systems 1					
Course id:	EE401							
Number of ECTS:	7							
Teacher:		Švenda S	S. Goran					
Course status:		Elective						
Number of active tead	hing classe	es (weekly	r)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	3	3	0	0	0			
Precondition courses			None					

#### 1. Educational goal:

Programme language Fortran. Fundamentals in Microsoft Visual Studio (MSDev).

2. Educational outcomes (acquired knowledge):

Writing programme for Windows operating system using programme language Fortran.

#### 3. Course content/structure:

Development environment (MSDev). Elements of the programme language Fortran (declarations and using of data, sequences and pointers, programme, programme unit and procedure management, object-oriented Fortran, classes, inheritance, polymorphism, interoperability with C++).

#### 4. Teaching methods:

Lectures - Auditory

Knowledge testing carrying out a task based on writing a code for solving an actual task before taking oral/written part of the examination. Oral part of the examination – theoretical part and written examination – exercises.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Computer excersise defence	Yes	40.00	Written part of the exam - tasks and theory	Yes	50.00					
Exercise attendance	Yes	5.00								
Lecture attendance	Yes	5.00								

ı			Literature		
I	Ord.	Author	Title	Publisher	Year
	1,	D.Bekut, J.Dujić, R.Bibić	Primena računara u elektroenergetici	Fakultet tehničkih nauka, Novi Sad	2005
	2,	R.Bibić, J.Dujić, D.Bekut	Primena računara u elektroenergetici	Fakultet tehničkih nauka, Novi Sad	2006
I	3,	M.Milić, D.Bekut	Primena računara u elektroenergetici - C++	Fakultet tehničkih nauka, Novi Sad	2007

## FACUI

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:			Application of microprocessors in power engineering						
Course id:	EE408A								
Number of ECTS:	6								
Teacher: Marčetić P. Darko									
Course status:		Elective							
Number of active tead	hing classe	es (weekly	)						
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:				
3		1	2	0	0				
Precondition courses			None						

#### 1. Educational goal:

Introducing undergraduate students to the basic principles of microprocessor system design in power engineering. The student gains knowledge in two fields: microcontrollers and digital control of electrical devices with numerous application examples.

#### 2. Educational outcomes (acquired knowledge):

After theoretical lectures and laboratory practice students gain practical knowledge in the field of microprocessors and digital control of electrical drives. Acquired knowledge can be used for solving specific engineering problems.

#### 3. Course content/structure:

Introduction. Numerical systems, codes, switching algebra, digital electronics. The basic principles of microprocessors. Elementary computer-the composition and functioning. Bus, RAM, ROM, I/O unit, other components. Typical microprocessor and microcontroller systems. 8-bit microcontroller 8031 and the family (8051, 80535,...) Internal architecture. Memory, registers, interruptions and priorities. 16-bit microcontroller 4011 (dsPIC family). Internal architecture. Memory, registers, interruptions and priorities. Basic instructions and programming. Analysis and programme testing (debugging). Digital signal processors (DSP). Programmable logic controllers (PLC). Possibilities of application of microprocessors in power engineering and industry. Realization of the regulatory circuit of the power converter using microprocessors. Realization of digital control law. Sensors, speed measurement, position (encoder and resolver), voltage, current. Application of microprocessors in the regulated DC electric motor. Application of microprocessors in the voltage controllers (DC and AC voltage controllers). Application of microprocessors in the AC controlled drive. Application of PLC in industrial plants. Other applications. The application of DSP in servo controlled alternating drives and in the motion control.

#### 4. Teaching methods:

The course consists of lectures with contemporary illustrations, and the laboratory practice (of interactive and demonstration type)

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations			Points	Final e	xam	Mandatory	Points			
Homework			Yes	5.00	Coloquium exam		Yes	40.00			
Laborat	tory exercise attendance		Yes	5.00	Oral part of the exam		Yes	30.00			
Test			Yes	20.00							
	Literature										
Ord.	Author			Title	;	Publishe	er	Year			
1,	Darko Marčetić , Vlado Porobić		na mikroproc kum laborator		ektroenergetici , bi	FTN Novi Sad izdav	/aštvo	2011			
2,	Slobodan N Vukosavić	Digital	no upravljanj	e električr	nim pogonima	Akademska misao		2003			
3,	3, Milić Stojić Digitalni sistemi upravljanja					Nauka, Beograd		1994			
4,	Darko Marčetić		orocesorsko ι račima	ıpravljanje	e energetskim	FTN Izdavaštvo		2012			

# STAS STUDIO

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			_	( ; ID (	
Course id:	E1SP1Z		Pr	ofessional Practice	
Number of ECTS:	2				
Teachers:					
Course status:		Elective			
Number of active tead	ching classe	es (weekly	)		
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:
0	(	)	0	0	3
Precondition courses			None		

#### 1. Educational goal:

Acquiring direct knowledge about activities and organization of companies and institutions dealing with profession chosen by the student and possibilities of application of previously acquired knowledge in practice.

#### 2. Educational outcomes (acquired knowledge):

Enabling students to apply previously acquired theoretical and professional knowledge for solving specific practical engineering problems within the chosen company and institution. Introducing students to the activities of the chosen company or institution, to the ways of doing business, management and place and role of the engineer in their organizational structures.

#### 3. Course content/structure:

It is created individually for each candidate, in agreement with the company or institution management where professional practice is taking place, and in accordance with the needs of profession for which the student is being trained.

#### 4. Teaching methods:

Consultations and professional practice journal writing where the student describes activities done during the professional practice.

	Knowledge evaluation (maximum 100 points)							
Pre-examination obligations Mandatory Points Final exam Mandatory						Points		
	Literature							
Ord.	Ord.   Author   Title   Publisher   Year						Year	

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EE0406		Ele	ectric Power Quality					
Number of ECTS:	5								
Teachers:		Grabić U	rabić U. Stevan, Katić A. Nenad, Katić A. Vladimir, Milanović V. Jovica						
Course status: Elective									
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		1	2	0	0				
Precondition courses			None						

#### 1. Educational goal:

The course aim is to introduce students to contemporary problems of power quality, which in the electric power market conditions become one of the benchmarks of EES. The aim is to enable students to understand, analyze, design, and explores a wide range of power quality problems, especially the appearance of higher harmonics, rapid voltage variations (dips, short disappearance, jumps, etc.), flickers and faulty grounding, and to create and apply modern standards, recommendations and other technical regulations, and to plan and implements complex equipment for measuring quality parameters in the laboratory or in the field.

#### 2. Educational outcomes (acquired knowledge):

Students will be educated to understand, analyze, design, and explores a wide range of power quality problems, to create and apply modern standards, recommendations and other technical literature, and to plan and implement complex power quality parameters monitoring & measurements in the laboratory or in the field.

#### 3. Course content/structure:

Introduction: The concept and basic definitions, systematization. Mathematical background: Fourier transform, Nyquist frequency, aliasing, choice of window functions. Sources of power quality degradion: Power converters - rectifiers, inverters, choppers, voltage regulators, faults in power systems, operation of the automatic reclosing units (APU), effects of atmospheric discharges, electric arc furnaces and nonlinear characteristics of electric machines and transformers, industry - large drives start-up, compensation, resonance, etc. The effects of degraded power quality: resonance in the network, influence on telecommunication signals, effects on measurements accuracy, effects on the control circuits, influence on sensitive electronic and microprocessor devices operation (computers, electronic scales, etc..). Effects on electrical machines, cables etc. Impact on the operation of the factory drives and examples from practice. Power quality monitoring: Measurement systems and equipment, strategies and methods of measurement, analysis and presentation of measurement results. Methods fof improving the quality: standards and recommendations, harmonic filters, active filters, uninterable power systems, static compensators. Settings of the power quality.

#### 4. Teaching methods:

method of theoretical problems presentation, mathematical modeling, solving tasks with real situations and settings, as well as laboratory measurements and the application of new tools and software will be applied.

Knowledge evaluation (maximum 100 points)

Pre-examination obligations			Mandatory	Points	Final ex	xam	Mandatory	Points
Exercise	e attendance	Yes	5.00	Written part of the exam	- tasks and theory	Yes	50.00	
Lecture attendance Yes							•	
Project	task		Yes	40.00				
Literature								
Ord.	Author			Title	;	Publishe	er	Year
1,	Roger Dugan, Mark McGranaghan, Surya Santoso	Electri	cal power sys	stems qua	ality	McGraw-Hill, New Y	⁄ork	2003
2,	Vladimir Katić	Kvalitet električne energije - viši harmonici			UNS-Fakultet tehnid Edicija Monografije,	,	2002	

## FACULTY OF TE

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:		_					
Course id:	EE407		Electrical Installations and Industrial Power Engineering				
Number of ECTS: 6							
Teacher: Gušavac J. Strahil							
Course status:		Elective					
Number of active teac	hing classe	es (weekly	r)				
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:		
3 3		3	0	0	0		
Precondition courses			None				

#### 1. Educational goal:

The main course objective is to train students for electrical installation design based on the knowledge of electrical properties of devices and mastering the systems of protection from the excessive voltage. Students are also trained about power supply principles of different categories of structures and consumers, about compensation of reactive energy and load management and protection of structures against lightning.

2. Educational outcomes (acquired knowledge):

Knowledge of the design methods of residential installations. Knowledge of the design methods on installations in industry. Forming technical parts of the conceptual design.

#### 3. Course content/structure:

Types of electrical installations, their design and coordination. Electrical device properties. Dimensioning and protection from circuits in electrical installations. Protection from over-voltage contact. Protection from the weather discharge. High and low voltage power network in industry and large buildings. Reactive compensation of energy and power. Load management.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Final exam	Mandatory	Points					
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	35.00				
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	35.00				
Term paper	Yes	20.00		-					

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	M. Jovanović	Beograd	1996						
2,	G. G. Seip	Electrical Installations Handbook	Siemens, Berlin	1987					
3,	M. Kostić	Teorija i praksa projektovanja električnih instalacija	Akademska misao, Beograd	2002					
4,	Lj. Gerić, M. Savić, Č. Vujović	Zaštita objekata od atmosferskih pražnjenja	FTN, Novi Sad	2001					

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			Measurement systems in power sector						
Course id:	EE420A								
Number of ECTS:	5								
Teacher: Bojković J. Gordana									
Course status:		Elective							
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3 0		)	2	0	0				
Precondition courses			None						

#### 1. Educational goal:

Acquiring knowledge in the field of measurement systems applied in power engineering. Design of measurement instruments and systems in this field. Introduction to the standards of connection for measurement instruments.

#### 2. Educational outcomes (acquired knowledge):

Introduction to the measurement systems in power engineering. Conditioning of measurement signals in power engineering. Digital measurement systems. Standards for connection of measurement instruments. Application of oscilloscopes. Digital frequency and time measurement. Sources of measuring and test signals. Signal analyzers. Design of measurement instruments and systems in power engineering. Adaptive measurement instruments in power engineering. Multichannel measurement. High frequency measurements. Modulation measurement. Measurement of electromagnetic field in power engineering. Systems for measurement and control, quality management systems, integrated systems, data protection.

#### 3. Course content/structure:

Lectures; Laboratory Practice; Consultations.

#### 4. Teaching methods:

Lectures. Laboratorz exercises. Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final ex	xam	Mandatory	Points			
ory exercise defence	30.00	Written part of the exam	- tasks and theory	Yes	50.00				
Coloquium exam									
Oral part of the exam									
		Liter	ature						
Author		Title			Title			r	Year
Gregory K. McMillan ed. and Douglas M. Considine	PROCESS/ INDUSTRIAL INSTRUMENTS AND CONTROLS HANDBOOK McGRAW-HII			McGRAW-HILL		1999			
	Author Gregory K. McMillan ed. and	Pre-examination obligations Ory exercise defence  Author  Gregory K. McMillan ed. and PROCESS/ INDUS	Pre-examination obligations Mandatory Points ory exercise defence Yes 30.00  Liter  Author Title  Gregory K. McMillan ed. and PROCESS/ INDUSTRIAL II	Orly exercise defence         Yes         30.00         Written part of the exam           Coloquium exam           Oral part of the exam           Literature           Author         Title           Gregory K. McMillan ed. and         PROCESS/ INDUSTRIAL INSTRUMENTS AND	Pre-examination obligations Ory exercise defence  Yes  30.00  Written part of the exam - tasks and theory  Coloquium exam  Oral part of the exam  Literature  Author  Title  Publishe  Gregory K. McMillan ed. and  PROCESS/ INDUSTRIAL INSTRUMENTS AND  McGRAW HILL	Pre-examination obligations  Mandatory Points Final exam Mandatory Ory exercise defence  Yes 30.00 Written part of the exam - tasks and theory Yes Coloquium exam No Oral part of the exam Yes  Literature  Author Title Publisher  Gregory K. McMillan ed. and PROCESS/ INDUSTRIAL INSTRUMENTS AND McGRAW HILL			

# A STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			Electrical Design and Calculation Software							
Course id:	EE421A									
Number of ECTS:	5									
Teacher:		Oros V. f	Oros V. Đura							
Course status:		Elective								
Number of active teac	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	)	2 0 0							
Precondition courses			None							

#### 1. Educational goal:

Introducing students to the basic principles of technical documentation design in power engineering.

2. Educational outcomes (acquired knowledge):

Acquired knowledge could be used in solving specific engineering problems while designing technical documentation.

#### 3. Course content/structure:

Types of projects and their contents. Project assignment. Technical description. Technical conditions. Investment documentation – bill of quantities. Graphical attachments and their design. Implementation of regulations and standards in documentation design. Application of software in design. Fundamentals of AutoCAD and EPLAN.

#### 4. Teaching methods:

Lectures and computer laboratory practice.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points Final exam Mandatory Po											
Laboratory exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	25.00						
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	25.00						
Project defence Yes 40.00											
Literature											

	Ord. Author		Title	Publisher	Year
ı	1,	M. Isailović, M. Bogner	Propisi o izgradnji objekata	SMEITS	2000
	2,	G. Dotlić	Elektrotehnika kroz standarde, zakone, pravilnike i tehničke preporuke	SMEITS	2006
I	3,	G. Omura	AutoCad 14	Mikro knjiga	1997



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EE430	]	Control circuits in power electronics							
Number of ECTS:	5									
Teacher:		Porobić E	Porobić B. Vlado							
Course status:		Elective								
Number of active tea	ching classe	es (weekly	')							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2 0 0 0								
Precondition courses	3		None							

#### 1. Educational goal:

Acquisition of basic knowledge in the application of electronic circuits in power converters. The goal of this course is to educate students to design, construct and analyze control conditioning circuits in power electronic converters, especially DC / DC and DC / AC type

#### 2. Educational outcomes (acquired knowledge):

Students will be are able to understand the principles and methods of control circuits of powerful and compact semiconductor components of converter module, calculates a simple solution to all conditioning circuits of power converters, primarily DC/DC and DC/AC type. The acquired knowledge can be used to solve practical engineering problems

#### 3. Course content/structure:

Conditioning electronics in DC/DC and DC/AC inverters. Compact converter modules. Control electronics of switches in power part of the inverter. Conditioning of control and measurement signals, galvanic isolation, protective circuitry. A review of the supporting electronics for asynchronous and synchronous motor with permanent magnet, brushless motor, stepper motor. Electronic circuits for signal processing speed/motor position. Examples of application of these circuits in the power electronic devices. Commercial devices, markets and methods of use

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultation.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00					
Lecture attendance	Yes	5.00								
Term paper	Yes	20.00								

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Branko Dokić	Energetska elektronika: pretvarači i regulatori	Elektrotehnički fakultet, Banja Luka	2000						
2,	S.Tešić, D.Vasiljević	Osnovi elektronike	Građevinska knjiga, Beograd	2005						
3,	D. Živković, M. Popović	Impulsna i digitalna elektronika	Akademska misao	1996						

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#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:										
Course id:	EE431		Renewable Sources and Small Power Plants							
Number of ECTS:	5									
Teacher:		Katić A. Vladimir								
Course status:		Elective								
Number of active tead	hing classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2 0 0 0								
Precondition courses			None							

#### 1. Educational goal:

The course objective is that students acquire basic knowledge in the working principles and exploitation of renewable sources of power, and above all wind, solar and water energy (small hydro plants). The objective is to get introduced to the methods of operation, design and technical-economic aspects of their application in detail, especially considering the capacities in Vojvodina and Serbia. Besides, implementation of these sources into the existing distribution system will be presented along with all issues and specific features of open power market.

#### 2. Educational outcomes (acquired knowledge):

Students will be able to calculate, use and design different forms of renewable sources of power and to improve possibilities of theirs use. They will acquire practical experience in working with wind and solar plants, as well as with the methods of their connection and operation in the existing power system.

#### 3. Course content/structure:

Introduction – review of renewable sources of power. Energy potential and geographical distribution. Situation in Serbia and Vojvodina. Methods of use and possibilities of conversion. Solar and wind energy converters into electricity – theory, models and methods of functioning. Characteristics and selection of electric generators in the wind plants. Energy electric converters – application in wind plants, application in solar plants. Issues of production and assembly. Complex plants (wind farms) – working methods, surveyor mode, management, connection to the PES. Small hydro plants – design, control and connection. Economic – commercial conditions of application of renewable sources for production and sales of electricity. Possibilities of implementation of renewable sources into the power system. Advantages and issues in the distributed operation (unstable network, island operation, quality of electricity etc.).

#### 4. Teaching methods:

Theoretical aspects and mathematical models will be presented during the lectures. Problem solution and designing methods will be done during the auditory practice, while practical work and characteristic measurements will be done within laboratory practice. Independent student work will be evaluated through project design.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Laboratory exercise attendance	Yes	5.00	Theoretical part of the exam	Yes	50.00					
Laboratory exercise defence	Yes	40.00								
Lecture attendance	Yes	5.00								
Literature										

Ord.	Author	Title	Publisher	Year
1,	Thomas Ackermann	Wind Power in power systems	John Wiley and Sons, Chichester	2005
2,	JENKINS, ALLAN, CROSSLEY, KIRSCHEN	Embedded generation	University Press, London	2000



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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:		Programming of Measurement and Data Acquisition Systems							
Course id:	EIPDMS		The second of the second second of the secon						
Number of ECTS:	4								
Teachers: Sovilj M. Platon, Mitrović Lj. Zoran, Vujičić V. Vladimir									
Course status:		Elective							
Number of active teac	hing classe	es (weekly	r)						
Lectures:	ectures: Practical classe		Other teaching types:	Study research work:	Other classes:				
2	(	)	0	1					
Precondition courses			None						

#### 1. Educational goal:

The acquisition of knowledge in the field of application, design and development of software in microprocessor based measurement and acquisition systems.

#### 2. Educational outcomes (acquired knowledge):

understanding of architecture of software applications for microprocessor based measuring and acquisition systems; the ability to work in interdisciplinary teams on understanding and solving problems related to the application, design and development of software in microprocessor based measurement and acquisition systems; the ability to search the literature and other forms of information in the field of software in microprocessor based measurement and acquisition systems and ability for presentation of research results;

#### 3. Course content/structure:

Methods for design and development of software in microprocessor based measurement and data acquisition systems. Programming languages for development of software in microprocessor based measurement and data acquisition systems. Integrated development environment for the design and development of software in microprocessor based measurement and data acquisition systems. Preparing documents for software in microprocessor based measurement and data acquisition systems. Preparing documents for software in microprocessor based measurement and data acquisition systems. Practicum in design and development of software in microprocessor based measurement and data acquisition systems. Development of software in microprocessor based measurement and data acquisition systems based on Delphi programming language. Development of software in microprocessor based measurement and data acquisition systems based on Visual C # programming language. Development of software in microprocessor based measurement and data acquisition systems based on Visual C + + programming language.

#### 4. Teaching methods:

Lectures, auditory exercises, laboratory exercises, consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points	
Laborat	ory exercise attendance		Yes	5.00	Written part of the exam	Written part of the exam - tasks and theory Yes		50.00	
Laborat	ory exercise defence		Yes	20.00	Practical part of the exan	n - tasks	Yes	20.00	
Lecture attendance			Yes	5.00					
				Liter	ature				
Ord.	Author			Title	;	Publishe	er	Year	
1,	Marco Cantù	Maste	ring Delphi 7			Sybex		2003	
2,	2, Jon Skeet C# in Depth					Manning Publication	าร	2010	
3,	3, Microsoft Corporation Microsoft Visual C++ .NET Language Referen			anguage Reference	Microsoft Press		2002		
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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:		Design and development of industrial devices and measurement							
Course id:	EIPMS1		systems 1						
Number of ECTS:	7		Systems 1						
Teachers:		Pejić V. Dragan, Vujičić V. Vladimir, Mitrović Lj. Zoran							
Course status:		Elective	Elective						
Number of active teac	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	0 3 0 0							
Precondition courses			None						

#### 1. Educational goal:

Acquiring knowledge in the field of Design and Development of Industrial Instruments and Measurement Systems.

2. Educational outcomes (acquired knowledge):

Students can design and develop industrial instruments and measurement systems.

#### 3. Course content/structure:

The design methodology, a comprehensive approach, procedures and methods, TOP-DOWN and BOTTOM-UP; the decomposition of complex systems, joining of system parts, hardware and software design, team work.

#### 4. Teaching methods:

Lectures, laboratory practice, consultations.

	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandatory Points Final exam Mandatory						Points					
Laboratory exerci	Laboratory exercise defence Yes 30.00 Written part of the exam - tasks and theory Yes 70.0							70.00			
	Literature										
Ord.	Author			Title		Publishe	r	Year			
1, Hank Zu	mbahlen	Linear	circuit desigr	n handboo	k	Analog Devices		2008			
2, Jim Williams The art and science of analog circuit design EDN					1998						
3, Protel International Protel 99SE handbook Protel International						2000					



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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EIWDS	V\	Web-based Measurement and Data Acquisition Systems							
Number of ECTS:	7									
Teachers: Milosavljević P. Branko, Sovilj M. Platon, Mitrović Lj. Zoran										
Course status:		Elective								
Number of active tead	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	0 2 0 0								
Precondition courses			None							

#### 1. Educational goal:

The aim of the course is to present the latest solutions and methods in the field of design and application of web-based measurement systems.

#### 2. Educational outcomes (acquired knowledge):

understanding of the purpose, design and technology of web-based measurement and data acquisition systems; the ability to search the literature and other forms of information in the field of web-based measurement and data acquisition system and the ability of the presentation of research results; good knowledge and understanding of the modules of web-based measurement and data acquisition system; knowledge and skills in the field of designing web-based measurement and data acquisition system.

#### 3 Course content/structure:

The structure of web-distributed measurement and data acquisition system. Types of data acquisition module in distributed measurement and acquisition systems in different applications (industry, environmental protection, energy systems, appliances): smart sensors, RFID tagged objects, dedicated embedded measurement and data acquisition systems, and computer measurement and data acquisition systems. Expansion of data acquisition modules with integrated web servers and web applications. The role and implementation of servers in distributed measurement and data acquisition systems. Client applications in distributed measurement and data acquisition systems. Stand-alone client applications and web client applications. Client devices: computers, general-purpose embedded systems dedicated to portable devices for general use. Cloud service integration in web-distributed measurement acquisition systems. Programming and deployment of server modules. Programming and deployment of server modules. Programming and deployment of client modules. The acquisition of embedded web servers implemented in C programming language. Examples of DotNET, JAVA, PHP and Python embedded data acquisition web applications. Practical examples and servers in the middle tier web-distributed measurement and acquisition systems in different applications. Practical examples and client modules in web-distributed measurement and acquisition systems in different applications. Subsystems for automatic calibration, testing and metrological support in web-distributed measurement acquisition systems.

#### 4. Teaching methods:

Lectures, labaratory exercises and consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points	
Laborat	ory exercise defence		Yes	20.00	Written part of the exam	Written part of the exam - tasks and theory Yes 5			
Project			Yes	30.00					
	Literature								
Ord.	Author		Title			Publishe	er	Year	
1,	F. Davoli		te Instrument ructure: Appli		vices on the E- nd Tools	Springer		2011	
2,	F. Davoli		Remote Instrumentation and Virtual Laboratories : Service Architecture and Networking			Springer		2010	
3,	V. R. Haasz		Advanced Distributed Measuring Systems - Exhibits of Application			River Publishers		2012	
4,	B. Milosavljević, M. Vidaković	Java i	· · · · · · · · · · · · · · · · · · ·			Grupa za informacio tehnologije, Novi Sa		2010	

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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			Principles of radio communication							
Course id:	EK457									
Number of ECTS:	6									
Teacher:		Milošević	Milošević S. Vladimir							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2 1 0 0								
Precondition courses			None							

#### 1. Educational goal:

Mastering the basic knowledge related to the use of radio-emission in the function of remote data transfer. Introduction to the contemporary radio-systems.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge, the use of programme simulations.

#### 3. Course content/structure:

Development of radio-communications. Electromagnetic wave properties. Transfer function of radio-connection. Antennas, the characteristics and parameters. EM wave propagation, attenuation in the free space, the impact of Earth, atmosphere and ionosphere on the propagation of waves. Fading. Diversity transfer techniques. Multiple access techniques (FDMA, TDMA, CDMA). Review and systematization of mobile radio systems. Conventional radio network. Characteristics of modern cellular radio networks: mobile telephony (GSM), tracking system (TETRA), DECT, Radio-LAN. Satellite mobile systems. Development of universal mobile telecommunication systems (UMTS).

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)							
Pre-examination obligations	Final exam	Mandatory	Points				
Homework	No	10.00	Written part of the exam - tasks and theory	Yes	70.00		
Laboratory exercise defence	Yes	20.00	Coloquium exam	No	35.00		
Test Yes 10.00							

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	M. B. Dragović	Antene i prostiranje radio talasa	Elektrotehnički fakultet, Beograd	1996					
2,	B. Notaroš i dr	Zbirka ispitnih pitanja i zadataka iz Elektromagnetike	ETF, Beograd	1998					
3,	T.S. Rappaport	Wireless Communications – Principles & Practice	Prentice Hall	1996					
4,	G. L. Stueber	Principles of Mobile Communication	Kluwer Academic Publishers	2000					
5,	W.C.Y. Lee	Mobile communications engineering	McGrow-Hill, New York	1982					
6,	D.M.Balston, R.C.V. Macario	Cellular Radio Systems	Artech House, London	1993					
7,	S.H.Redl	An Introduction to GSM	Artech House, London	1995					

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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EK458	]	Telecommunication networks							
Number of ECTS:	6									
Teachers:		Šećerov E. Emil, Bajić D. Dragana, Lončar-Turukalo G. Tatjana								
Course status:		Elective								
Number of active tea	ching classe	es (weekly	′)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	,	1 2 0 0								
Precondition courses	3		None							

#### 1. Educational goal:

Acquiring basic knowledge about organization and modern telecommunication network functioning. Introduction to standards applied in practice.

#### 2. Educational outcomes (acquired knowledge):

Complete understanding of network technologies - knowledge of the functions of switching and transport systems. Understanding the principles of fiber optic transmission and the basic elements needed for the design of optical systems in practice. Qualification for inclusion in the work in the organizations offering telecommunications services.

#### 3. Course content/structure:

#### 4. Teaching methods:

Lectures; Auditory Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	xam	Mandatory	Points	
Project			Yes	30.00	Written part of the exam	- tasks and theory	Yes	70.00	
	Literature								
Ord.	Author			Title	:	Publishe	r	Year	
1,	T.N. Saadawi, M.H.Ammar, A.E.Hakeem	Funda	Fundamentals of Telecommunication Networks			John Wiley and Sor	ıs	1994	
2,	H. G. Perros	Conne	ction-oriented	d Network	is .	John Wiley & Sons		2005	
3,	I. Minei, J. Lucek		-Enabled App ew Technolog		Emerging Developments	John Wiley & Sons		2005	
4,	Aleksandar Marinčić	Optičk	e telekomuni	kacije		Univerzitetski udžbe	enik	1997	
5,	D. Bertsekas, R. Gallager		Data Networks (http://web.mit.edu/dimitrib/www/datanets.html)			Prentice Hall		1992	
6,	D. Bajic, T. Lončar Turukalo		Skripte i prezentacije predmetnih nastavnika na sajtu www.ktios.net					2010	
7,	7, Stanislav Matić Principi komutacije u telekomunikacijama				Javno preduzeće P saobraćaja "Srbija"	TT	1993		

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EK459		Wireless sensor networks							
Number of ECTS:	5									
Teacher:		Stefanov	Stefanović D. Čedomir							
Course status:		Elective								
Number of active tead	hing classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	0 0 0								
Precondition courses			None							

#### 1. Educational goal:

Capability to analyze and synthesize wireless sensor and ad-hoc networks. Capability to research and design of WSN solutions.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge, practical work (usage of simulations, work on the laboratory equipment). Design and implementation of wireless sensor network solutions, embedded system programming.

#### 3. Course content/structure:

Introduction to wireless sensor networks; basic features of wireless sensors, ad-hoc and actuator networks; theoretical basis and algorithms on graphs; analysis of power efficiency; protocols and standards (physical level, level of control of medium control, network level); application and usage scenarios, fundamentals of wireless networks for monitoring physiological parameters (body area networks); design, simulation and implementation of wireless sensor networks.

#### 4. Teaching methods:

Lectures; Auditory, Computer and Laboratory Practice; Homework Assignments; Field Work; Colloquium and Examination.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	60.00				
Lecture attendance	Yes	5.00							
Project	Yes	30.00							
	Literature								

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	I. Stojmenović	"Handbook of sensor networks: algorithms and architecture"	John Wiley & Sons	2005						
2,	H. Wu and Y. Pan	"Medium Access Control in Wireless Networks", pp. 383-4068.	Nova Science Publishers	2008						
3,	C. S. R. Murthy and B.S. Manoj	"Ad Hoc Wireless Networks: Architectures and Protocols"	Prentice Hall	2004						

## NAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id: EM400A Complex Digital System Design									
Number of ECTS:	6								
Teacher:		Struharik J. Rastislav							
Course status:		Elective							
Number of active tead	ching classe	s (weekly	)						
Lectures:	Practical	classes:	classes: Other teaching types: Study research work: Other classes:						
3	C	)	3 0 0						

#### Precondition courses

#### 1. Educational goal:

Acquiring knowledge in the field of architecture of the contemporary microprocessors, design of contemporary microprocessors and other complex systems based on the given specification, the use of advanced possibilities of the VHDL language for description of complex digital systems. Hardware design based on usage of contemporary EDA tools.

- 2. Educational outcomes (acquired knowledge):
- ability to design contemporary microprocessor or some other complex digital system using VHDL language based on the given specification
- ability to use RTL design methodology and contemporary design tools for hardware synthesis

#### 3. Course content/structure:

VHDL language for digital system description. Advanced possibilities of the VHDL language. Subprogrammes, procedures, functions. Packages and their use. Alias commands. Generics. Components and configurations. Generate commands. Attributes and groups. Systematic approach in the complex digital system design. Data path and control path. Pipelined and parallel processing. Structure of modern microprocessor. ILP processor architecture. Processors with pipelined processing system. WLIV processors. Superscalar processors. High Level Synthesis. Algorithms for alocation, scheduling and binding. Interface synthesis. Contemporary EDA tools for High Level Synthesis.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final exam Mandatory		Points		
Laboratory exercise defence			Yes	20.00	Written part of the exam	/ritten part of the exam - tasks and theory Yes			
Test			Yes	10.00					
				Liter	ature				
Ord.	Author		Title			Publishe	er	Year	
1,	J. L. Hennessy, D. A. Patterson		Computer Architecture, Fourth Edition: A Quantitative Approach			Morgan Kaufmann	Publishers	2006	

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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering

FTN Novi Sad

2006



## Table 5.2 Course specification

Course:							
EM401		Real-Time	e Microcomputer Systems				
6							
	Malbaša	Malbaša D. Veljko					
	Elective						
hing classes	s (weekly	)					
Practical of	ll classes: Other teaching types: Study research work: Other classes:						
0		3 0 0					
	6 hing classe	6 Malbaša Elective	6 Malbaša D. Veljko Elective hing classes (weekly)	Malbaša D. Veljko  Elective  hing classes (weekly)			

#### Precondition courses

#### 1. Educational goal:

Enabling students to design, simulate, test and implement hardware and software of microcomputer systems for implementation into other embedded systems and real-time operation.

#### 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will be able:

- to write and interpret specification of embedded microcomputer systems,
- to design the model of embedded microcomputer system based on the given application and specification with minimal hardware resources
- to understand interaction between hardware and software of embedded microcomputer systems and to be able to adjust hardware and software components in order to achieve required system performance with minimal resources.
- to understand and apply industrial standards used in embedded systems.
- to design programme support for real-time operation for the given platform of embedded system.
- to apply completed core of the operating system for real-time operation in solving problems from engineering practice.
- to integrate hardware and software components of embedded systems along with surrounding and to test the system as a whole.

#### 3. Course content/structure:

Structure and properties of embedded microcomputer systems. Interaction of embedded microcomputer systems. Real-time operation. Specification of embedded microcomputer systems. Models of built-in microcomputer systems. Connection with the environment and industry standards. Designing hardware and software of embedded microcomputer systems. The core of real-time operating systems. Application of cores for the real-time operation in solving practical problems. Designing application programs for real-time operation. Integration and testing of embedded microcomputer systems. Application of modern simulation tools for design, specification, verification, simulation and implementation of embedded system for real-time operation.

#### 4. Teaching methods:

V. Malbaša

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final ex	Final exam		Points		
Laboratory exercise attendance			Yes	5.00	Final exam - part one	Final exam - part one		25.00		
Laboratory exercise defence			Yes	40.00	Final exam - part two		Yes	25.00		
Lecture	attendance		Yes	5.00						
				Liter	ature					
Ord.	Author		Title Publisher			er	Year			
1	V Malbaša	Ugrađ	eni (embedde	ed) mikror	ačunarski sistemi -	ETN Novi Sad		2006		

Strana 122 Datum: 18.12.2012



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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:								
Course id:	E2313		Fundamentals of	Process and Energy Eng	ineering			
Number of ECTS:	4							
Teacher:		Gvozdenac D. Dušan						
Course status:		Elective						
Number of active tead	ching classe	es (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	2 0 1 0							
Precondition courses			None					

#### 1. Educational goal:

Introduction to technological, mechanical, electrical and control characteristics of industrial processes. Students learn about some energy intensive industrial processes (food industry, paper industry, cement industry, petrochemical industry, etc...). Students gain knowledge about the simultaneous analysis of the flows of raw materials on the one hand, and the flow of energy and water, on the other. Control and monitoring of these flows requires their modeling in real time.

#### 2. Educational outcomes (acquired knowledge):

Students will learn about all relevant technological processes in industry and will be able to perform the calculation of all the major flows of materials and energy. Students learn to analyze parameters that substantially affect product quality, safety, control and efficiency.

#### 3. Course content/structure:

Fundamentals of industrial processes in which change the chemical or physical-chemical properties of matter. Plants for basic energy transformations and their properties (boilers, cooling towers, compressed air, transformers, motors, etc.). Analysis of industrial processes (food industry - production of sugar, edible oil, meat and meat products, milk and dairy products, canning fruits and vegetables ..., paper industry, cement industry, oil industry and petroleum distillates. Modern control methods of industrial processes.

#### 4. Teaching methods:

Lectures. Exercises. Consultation.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandatory Points Final exam Mandatory Points										
Test	Yes	10.00	Theoretical part of the exam	Yes	40.00					
Test	Yes	10.00	Practical part of the exam - tasks	Yes	30.00					
Test Yes 10.00										
1 Secretaria										

		Literature		
Ord.	Author	Title	Publisher	Year
1,	D. Gvozdenac	Upravljanje energetski intezivnih industrijskih procesa	FTN	2013
2,	A. Bejan, G. Tsatsaronis, M. Moran	Thermal Design and Optimization	John Woley/Sons	1996
3,	W. F. Stoecker	Design of Thermal Systems	McGraw-Hill	1989
4,	L. C. Witte, P. S. Schmidt, D. R. Brown	Industrial Energy Management and Utilization	Hemispere Publishin Corporation	1988
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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EE420		Exploitation of Distribution Systems / Networks						
Number of ECTS:	6								
Teachers:		Popović l	opović N. Željko, Popović S. Dragan						
Course status:		Elective							
Number of active teac	hing classe	s (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	3 0 0 0								
Precondition courses			None						

#### 1. Educational goal:

The main objective is acquiring knowledge on operative management of distribution systems in normal and disaster states and on operative planning and optimization of distribution system.

#### 2. Educational outcomes (acquired knowledge):

Knowledge on business processes in distribution systems. Knowledge on methods, approach and tools applied in operation management and optimization of distribution system work.

#### 3. Course content/structure:

Power flow calculation in distributive system. State estimation. Operational management in distributive systems. Management in normal conditions: Tools (software and hardware) for determination, implementation and surveillance of optimal state in distribution systems. Systems for surveillance, data acquisition and equipment management (SCADA) in distribution network. Telecommunication infrastructure. Contemporary software systems for distribution management system (DMS). Control of voltage and reactive states in distribution system: mathematical models, optimization techniques, possible implementation ways. Management in disaster states: tools, models and optimization procedures for detection and isolation of failures and supply restorations in current distribution systems. Systems for manipulation automatization in distribution systems. Management systems (OMS). Operational planning and optimization: management of planned cuts, short term forecast of consumption/production, models and optimization procedures for determination of optimal configuration of distribution networks in contemporary distribution systems. Assets management and maintenance: tools and models for surveillance and state estimation of distribution system elements, maintenance strategies: maintenance based on equipment condition, maintenance based on risk assessment. Tools and approaches to measurements and risk assessment. A part of the classes are carried out through independent study and research work in the field of planning and optimization of distribution network. Study and research work includes active informing from scientific resources, organization and performance of experiments and statisitical data processing, numeric simulations

#### 4. Teaching methods:

Lectures or mentor work (consultations). Study and research work.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	65.00			
Test	Yes	10.00		<u> </u>				
Test	Yes	10.00						
Test	Yes	10.00						
Literature								

		Literature		
Ord.	Author	Title	Publisher	Year
1,	D. Popović, D. Bekut i V. Treskanica	Specijalizovani DMS algoritmi	DMS Group, Novi Sad	2004
2,	J. A. Momoh	Electric Power Distribution Automation Protection an Control	CRC Press	2007
3,	J. Northcote-Green and R. Wilson	Control and automation of electric power distribution systems	CRC Press	2007
4,	C. Strauss	Practical Electrical Network Automation and Communication Systems	Newnes	2003
5,	T. Gonen	Electric Power Distribution System Engineering	McGraw Hill	1986
6,	H. L. Willis	Power Distribution Planning Reference Book	Marcel Dekker	2004

# RESTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	El411		Measurements in robotics						
Number of ECTS:	7								
Teachers:		Milovanč	ovančev S. Slobodan, Mitrović Lj. Zoran						
Course status:		Elective	ective						
Number of active tead	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	3	0 0 0							
Precondition courses	econdition courses None								

#### 1. Educational goal:

Acquiring knowledge in the field of Measurement in robotics.

2. Educational outcomes (acquired knowledge):

Ability to design and use measurement components and devices specific for robotics.

3. Course content/structure:

Sensors in robotics (six-parameter, encoders, tachometers, measuring rods, measuring tapes, inclinometers). Transducers. Most often measured forces and moments.

4. Teaching methods:

Lectures; Laboratory Practice.

Knowledge evaluation (maximum 100 points)							
Pre-examination obligations Mandatory Points Final exam Mandatory Points					Points		
Laboratory exercise defence	Yes	30.00	Written part of the exam - tasks and theory	Yes	50.00		
	Coloquium exam	No	20.00				
Oral part of the exam Yes 20.0							

		Literature		
Ord.	Author	Title	Publisher	Year
1,	Mladen Popović	Senzori u robotici	Viša elektrotehnička škola Beograd	1996
2,	H. R. Everett	Sensors for mobile robots, theory and application	A. K. Peters	1995
	<del></del>		·	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EK312		Acoustics and Audio Engineering							
Number of ECTS:	6									
Teachers:		Delić D. \	Delić D. Vlado, Sečujski S. Milan							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	•	1 1 0 0								
Precondition courses			None							

#### 1. Educational goal:

Acoustics and audio engineering has a lot of applications in various fields (arts, medicine, noise, mechanical engineering, civil engineering, ...), and the best profession for this area are electrical engineers. Describe the nature of sound and present the basic theory of sound generation and propagation of sound waves. Explain what and how people can hear and how they perceive different sound pressure levels and the frequency content of sound, as well as the direction of the sound source. Explain how both the transmission and perception of sound are influenced by enclosed areas such as rooms and concert halls. Present the audio signals (speech, music and noise) and audio equipment for recording and playback, analysis and processing, as well as transmission of audio signals. Explain the electro-acoustic-mechanical analogy and how they are used to analyse acoustic systems.

#### 2. Educational outcomes (acquired knowledge):

Students will learn how sound waves are produced and how they propagate, what a human being can hear and how sound affects humans, as well as how sound is recorded, transmitted and reproduced. They will understand the differences in the behavior of sound both indoors and outdoors and learn to design a sound system. They will be able to evaluate the acoustic environment (in terms of speech intelligibility, quality of listening to music, noise level), and to select and place audio-equipment for recording of speech, music, and noise. Electrical engineers are qualified to deal with electro-acoustics because they know how to analyse acoustic-mechanical systems by means of equivalent electrical circuits.

#### 3. Course content/structure:

•The physical characteristics of sound (the rules for the production and propagation of sound waves). •Sound perception and its influence on the human being (auditory area; dB and phones, isophone lines, binaural localisation, sound masking effect). •Audio signals (speech, music, and noise – features and tools for analysing and processing (Sound Forge)). •Room acoustics (absorption / reverberation and their impact on sound level and intelligibility, acoustical quality of professional rooms). •Analogies between acoustic, electrical and mechanical systems (analysis of acoustic systems: acoustic absorbers, exhaust, muffler, loudspeaker boxes, bass-reflex, headsets, microphones). •Microphones, loudspeakers and headphones (principles and characteristics). •Audio mixers (audio-visual controls, level regulation, filters, regulation of dynamics and reverberation, monitoring and sound editing, multi-channel recording (5.1, 7.1, 10.2,...)). •Sound systems design for both indoors and outdoors. Microphone and loud speaker systems for high quality reproduction. •Recording of voice and music program (selection and placement of microphones, recording of an orchestra). •Digital techniques for recording and reproduction of sound (magnetic and optical recording, CD, DVD, Blu Ray; MP3).

#### 4. Teaching methods:

Lectures are conducted using Power Point presentations available to students in .pdf format. Presentations with specially created audio and video clips and animations demonstrate and illustrate key details in the lectures. The first part of the course (acoustics) is followed by auditory exercises. The second part of the course (audio engineering) is followed by exercises either in the Laboratory of Acoustics and Speech Technologies at FTN or in a sound studio at UNS. A visit to Radio Novi Sad is arranged, where students will learn about practical audio engineering, the music and speech studios, the anechoic room and the audio-theater complex. The students will write a midterm paper, whose defense is one of the exam prerequisites. Independent student work is supported through the web portal of the Chair of Telecommunications and Signal Processing - www.ktios.net.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Presentation	Yes	10.00	Written part of the exam - tasks and theory	Yes	50.00			
Term paper	Yes	20.00	Coloquium exam	No	20.00			
Test	Yes	10.00						
Test	Yes	10.00						

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Miomir Mijić	"Audio sistemi"	Akademska misao, Beograd	2011						
2,	Petar Pravica, Dragan Drinčić	"Elektroakustika"	VISER, Beograd	2006						
3,	Vlado Delić	Skripta sa predavanja	www.ktios.net	2012						

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#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EK460	]	Biomedical signal processing							
Number of ECTS:	6									
Teacher:		Bajić D. [	Bajić D. Dragana							
Course status:	atus: Elective									
Number of active tea	ching classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3		1	2 0 0							
Precondition courses	Precondition courses None									

#### 1. Educational goal:

Types of 1D and 2D biomedical signals and specific methods of their processing

2. Educational outcomes (acquired knowledge):

An overview of different signals acquired by specific biomedical equipment, and particular features of their processing techniques.

#### 3. Course content/structure:

1D signals: action potential; ECG, SBP, DBP, HR, EEG, EMG, specific data processing, compression; statistical analysis, artifact recognition and removal; RR and PI extraction from ECG and SBP signals, and problems. 2D signals, Radon transform, algebraic method for image reconstruction. ART, SIRT, SART. X-ray tomography. 4 generation of tomography equipment, spiral tomography, electronic tomography, artifacts, beam hardening, solutions. SPET and acquisition, exponential Radon transform, artifacts and elimination. PET image principles, electronic colimatior, attenuation elimination. NMR, description and problems. Ultrasound. Medical statistics.

#### 4. Teaching methods:

Lessons, practical work, visit to a relevant institutions.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations Mandatory Points Final exam Mandatory					Points			
Pro	Project Yes 30.00 Written part of the exam - tasks and theory Yes						70.00		
	Literature								
	Ord.	Author		Title Publisher					Year
	1,	B.H. Brown, R.H. Smallwood, D.C. Barber, et al	Medic	Medical Physics and Biomedical Engineering IOP Publishing Ltd					1999
	2,	D. Popović, M. Popović	Biome	Biomedicinska instrumentacija i merenja Nauka, Beograd				1997	

# TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			_						
Course id:	EK463		Pattern Recognition						
Number of ECTS:	5								
Teachers:		Crnojević	Crnojević S. Vladimir, Petrović S. Vladimir						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	0 2 0							
Precondition courses	n courses None								

#### 1. Educational goal:

Introduction to the basic concepts in the field of shape recognition; introduction to the contemporary methods for shape recognition.

2. Educational outcomes (acquired knowledge):

An overview of principles of contemporary methods for shape recognition.

Ability to understand basic principles and methods used in shape recognition, as well as the possibility of simple knowledge extension working on the specific problem.

3. Course content/structure:

Statistical shape recognition: Bayes decision theory, parameter estimation and distribution, nearest neighbor method, linear discriminant. Dimensionality reduction: PCA analysis, Fisher discriminant, feature subset selection. Clustering, neural networks, Support Vector Machines, Hidden Markov models. Joint Learning.

4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	kam			
Project defence			Yes	30.00	Theoretical part of the ex	am	Yes	70.00	
	Literature								
Ord.	Ord. Author Title Publishe					r	Year		
1,	Duda, Hart and Stork	Patter	Pattern Classification 2nd Ed.			2nd Ed.		2002	

# ASTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM407A		Computer aided design of digital integrated circuits						
Number of ECTS:	6								
Teacher:		Damnjan	ović S. Mirjana						
Course status:	e status: Elective								
Number of active teac	hing classe	es (weekly	)						
Lectures:	Practical classes:		Other teaching types:	Study research work:	Other classes:				
3	(	)	3	0	0				
Precondition courses			None						

#### 1. Educational goal:

Gaining knowledge in the field of computer aided design of digital integrated circuits with practical examples

#### 2. Educational outcomes (acquired knowledge):

Ability to design and implement CMOS digital circuits (combinational and sequential)

Ability to optimize CMOS digital circuits with respect to different constraints: size (cost), speed, power dissipation, and reliability Ability to design, simulate and analyze digital integrated circuits using Cadence

#### 3. Course content/structure:

Modern trends of development of modern digital circuits with a large scale of integration. Introduction to the design of digital circuits using a computer. Stick diagrams. Design masks techniques for digital circuits (full-custom and semi-custom). Synthesis of layout, design, simulation and verification. Design rules in the software package CADENCE. Design of basic digital circuit (inverter, OR, NOR, EXOR). Half-adders, full adders, flip-flops. Designing the basic memory elements. Counters. Design of PLA structure. Design of dynamic logic circuits. Using blocks in the design of complex digital circuits. Definition of basic and derived generating layers in CADENCE. Generation of the industry standard files (.CIF, .GDSII). Development of scientific and technical documentation after design.

#### 4. Teaching methods:

Lectures. Laboratory practice. The course is based on lectures, where theoretical concepts are explained and illustrated using design examples, and laboratory lessons. Simple digital logic circuits are analyzed using Cadence design tools. During the first part of laboratory work (4 weeks) students are taking this lessons in group of two, learning the Cadence environment. After that, they have to solve problems individually, with the guidance of teaching assistant. Carried out laboratory practices are included with up to 10% in final grade.

ory	Points	Final exam	N41 - 4	
		i iliai chaili	Mandatory	Points
	5.00	Theoretical part of the exam	Yes	35.00
	5.00	Practical part of the exam - tasks	Yes	35.00
	20.00		•	
		5.00	5.00 Practical part of the exam - tasks	5.00 Practical part of the exam - tasks Yes

#### Literature Ord. Title Author Publisher Year Računarsko projektovanje elektronskih kola 2005 Vladan Desnica WUS Austria & FTN Novi Sad Prentice Hall 2003 Jan M. Rabaey Digital integrated circuits Antonio J. Lopez Martin Tutorial Cadence design environment New Mexico State University 2003

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#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:			5-							
Course id:	EM408A		RF and microwave electronics							
Number of ECTS:	6									
Teachers:		Crnojević	c-Bengin B. Vesna, Dautović E	. Staniša, Struharik J. Rastislav						
Course status:		Elective								
Number of active tead	ching classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	3	3 0 0 0								
Precondition courses	Precondition courses None									

#### 1. Educational goal:

Students will gain fundamental knowledge from the field of RF and microwave electronics, with the focus on state-of-the-art microwave system, theoretical foundations, and the design of passive microwave components and circuits that operate above 1 GHz.

#### 2. Educational outcomes (acquired knowledge):

Fundamental theoretical and practical engineering knowledge about the design of passive components, circuits and systems that operate at frequencies above 1 GHz. Capability to analyze, design and install wireless systems of the next-generation. Basic microwave measurements. Fundamentals of CAD design of microwave passive components and circuits.

Acquired knowledge will be used in the engineering practice as well as in the further education: in courses Modeling and simulation of RF and microwave circuits and several courses at the MSc and PhD degree.

#### 3. Course content/structure:

?lectromagnetic (EM) theory. Maxwell's equations. Interaction of EM waves and materials. EM characteristics of materials and practical materials. Propagation of EM waves. Power and energy. Polarization and its applications. Reflection and transmission. EM theorems and principles (the duality theorem, the uniqueness theorem, the reciprocity theorem, the theory of images). Transmission line theory. Practical realizations of microwave transmission lines (planar transmission lines, waveguides, surface integrated waveguides). Analysis of microwave networks. Z, Y, ABCD and S matrices. Basic microwave measurements and characterization. Phenomena of resonance. Resonators. Practical realizations of resonators. Filter theory. Filter deisgn by the insertion loss method. Scaling and filter transformation. Filter types and configurations. Slow-wave effect. ENG effect. Defect ground structures. Artificial EM materials and applications.

#### 4. Teaching methods:

Lectures. Auditory excercizes. Laboatory excercizes.

Pre-examination obligations Mandatory P			Points	Final ex	kam	Mandatory	Points	
Laboratory exercise attendance Yes			5.00	Written part of the exam	- tasks and theory	Yes	60.00	
Lecture attendance			Yes	5.00	Oral part of the exam		Yes	10.00
Test			Yes	10.00				
Test			Yes	10.00				
Literature								
Ord.	Author			Title	;	Publishe	er	Year
1,	D. M. Pozar	Micro	Microwave and RF Wireless Systems			John Willey & Sons		2000
2,	G.L. Matthaei, et al.		Microwave filters, imedance-matching networks, and coupling structures			McGraww-Hill, USA		1968
3,	V. Crnojević-Bengin	Skript	a iz predmeta	RF i mikr	otalasna elektronika			2011

Knowledge evaluation (maximum 100 points)

## STAS STU UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM424A	(	Computer aided de	esign of analogue integrate	ed circuits				
Number of ECTS:	6								
Teacher: Videnović-Mišić S. Mirjana									
Course status: Elective									
Number of active tead	Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	1		2	0	0				

#### Precondition courses

#### 1. Educational goal:

To gain knowledge of analogue integrated circuits computer aided design

#### 2. Educational outcomes (acquired knowledge):

To gain knowledge of second order effect in contemporary submicron MOSFETs. MOSFET models in all operating regimes. To gain knowledge of passive components (resistance, capacitance and inductance) and of parameters that influence their design as a part of integrated circuit. To get familiar with the basic matching techniques and their use in current mirrors, voltage dividers, differential pairs. Pros and cons of the single transistor amplifiers, cascode and folded cascode amplifiers. To get familiar with the various topologies of the differential pair and their pros and cons. To get the knowledge of general issues while designing current mirrors and their topologies applicable in low-voltage technologies. Design of the integrated circuits with computer aided design tool Cadence.

#### 3. Course content/structure:

Comparison of the CMOS and bipolar technology. Basic MOSFET characteristics. Second-order effects in MOSFETs (body effect, channel length modulation, weak inversion regime, mobility degradation with vertical electrical field, velocity saturation in the strong inversion regime, breakthrough, hot-electron effect...). Scaling limitations for MOSFET. Large signal schematic and respective capacitances for MOSFET. MOSFET small- signal schematic and parameters (transconductance, body effect transconductance, output resistance). Passive components (resistance, inductance, capacitance) and their fabrication precision as a part of integrated circuits. Circuits and devices matching. Layout techniques (multifinger gate, common centroid, interdigitated, side by side, dummy components, substrate contacts, contact and connection matching, shielding). Antenna effect in integrated circuits. Matching in current mirrors, voltage dividers, differential pairs. Single stage amplifiers (common source, common drain, common gate). Cascode amplifer and folded cascode amplifier. Differential amplifier with various types of loads. Commode mode rejection ratio and power mode rejection ratio as differential amplifier figures of merit. Current mirrors. Type of current mirror appropriate for low-voltage applications.

#### 4. Teaching methods:

Lectures; Exercises; EDA tools laboratory exercises; Consultations. After completion of laboratory exercises students will work on a project, that finished contributes to the final mark with 15% maximum. Knowledge evaluation (maximum 100 points)

Pre-examination obligations			Mandatory	Points	Final e	Mandatory	Points		
Computer exercise attendance			Yes	5.00	Theoretical part of the exam		Yes	30.00	
Lecture attendance			Yes	5.00	Practical part of the exam - tasks Yes			40.00	
Project			Yes	20.00	•				
Literature									
Ord.	Author			Title	•	Publisher		Year	
1,	R. Jacob Baker	CMOS Circuit Design, Layout			t and Simulation	Wiley-IEEE Press		2010	
2.	B. Razavi	Design of Analog CMOS Inte			grated Circuits	McGraw-Hill Higher Education		2001	

Strana 131 Datum: 18.12.2012

# THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id: I600			Industrial Robotics						
Number of ECTS: 7									
Teachers:		Borovac A. Branislav, Spasić T. Dragan							
Course status:		Elective	Elective						
Number of active tead	Number of active teaching classes (weekly)								
Lectures: Practical		classes:	Other teaching types:	Study research work:	Other classes:				
3		)	3	0 0					
Precondition courses			None						

#### 1. Educational goal:

The course objective is for students to master the fundamentals of industrial robotics.

2. Educational outcomes (acquired knowledge):

The course outcome is the knowledge in fundamentals of industrial robotics.

#### 3. Course content/structure:

Basic concepts and definitions, homogenous transformations, kinematics of robots (direct and inverse problems), Denavit-Hartenberg notation, Jacobian, the synthesis of trajectory, dynamics of robots, robot control, robot programming, sensors in robotics and their application, application of robots in industrial problems.

#### 4. Teaching methods:

The course is held through lectures and practice. During practice students are obliged to pass one colloquium and to do and pass 3 computer exercises. Colloquium includes: homogenous transformations, direct and inverse kinematic problem, direct and inverse dynamic problem, planning the trajectory, industrial robot control. Computer practice is in MATLAB. The first exercise includes homogenous transformations, the second DH notation, the third calculation of trajectory (internal coordinates). Each exercise required defense. In order for student to gain the right to take the final examination, he/she has to take the colloquium and successfully do and defend all exercises. Final examination is in the form of the test and is related to theoretical questions.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations			Mandatory	Points	F	inal ex	cam	Mandatory	Points
Laborat	ory exercise defence		Yes	30.00	Theoretical part of the exam			Yes	40.00
					Practical part of the	e exan	n - tasks	Yes	30.00
				Liter	ature				
Ord.	Author		Title Pub				Publishe	Publisher	
1,	M. Vukobratović	Uvod u robotiku					Institut Mihajlo Pupin, Beograd		1986
2,	M. Vukobratović	Primenjena dinamika manipulacionih roboota					Tehnička knjiga, Beograd, II dopunjeno i izmenjeno izdanje		1990
3,	M. Vukobratović, D. Stokić	Primer	Primenjeno upravljanje manipulacionim robotima, Tehnička knjiga, Beograd, II dopunjeno izdanje					ograd, II	1990
4,	M. Spong, S. Hutchinson, M. Vidyasagar,	Robot Modelling and Control				John Wiley & Sons, 10 0-471-64990-2,	Inc., ISBN-	2006	
5,	L. Sciavicco, B. Sicilijano					Springer - Verlag, IS 85233-221-2	SBN 1-	2000	
6,	B. Borovac, G. Đorđević, M. Rašić, M. Raković	Industrijska robotika Fakultet tehničkih na pripremi)				auka (u	2007		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:		Numerical Algorithms and Numerical Software						
Course id: E231								
Number of ECTS:	4							
Teacher:		Konjović D. Zora						
Course status:		Elective						
Number of active teaching classes (weekly)								
Lectures: Practical		I classes: Other teaching types:		Study research work:	Other classes:			
2 (		) 1		0	1			

#### Precondition courses

#### 1. Educational goal:

Students gain basic knowledge about numerical analysis, methodology of applying numerical models in engineering disciplines, use of selected standard numerical software tools.

#### 2. Educational outcomes (acquired knowledge):

Understanding basic numerical models and ability to apply them for solving simple engineering tasks using numerical software tools.

#### 3. Course content/structure:

Introduction. Mathematical models and numerical models; methodology of solving engineering problems by applying numerical models; fields of application of numerical models in engineering. Basic numerical methods: numerical solutions of a system of linear algebra equations (direct and iterative procedures); numerical solutions of non-linear equations and systems; function approximation (interpolation and best approximation); differentiation and integration (maximum precision formula, maximum possible precision formula); common differential equations – initial condition (single-step and multi-step formulas, predictor-corrector procedures), boundary condition (shooting method, collocation formulas); function transformation (Fourier transform, wavelet transform); Numerical software tools: demands and functions, architecture, ways of use, available tools. Selected numerical software tools: architecture and ways of use, accompanying programming languages and programming.

#### 4. Teaching methods:

Teaching methods include: Lectures, computer practice, homework assignments, and consultations. During the lectures the content of the course is presented using the necessary didactic tools while student active participation is encouraged. The practical aspect of the course is covered at computer practice classes through assignments which students do independently or with the help of teaching assistants as well as through homework assignments (obligatory or optional). A student is expected to demonstrate the ability of independent task solving or understanding of the solution.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Computer exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00				
Homework	Yes	5.00							
Homework	Yes	5.00							
Homework	Yes	5.00							
Homework	Yes	5.00							
Laboratory exercise defence	Yes	40.00							
Lecture attendance	Yes	5.00							

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	Michael Heath	SCIENTIFIC COMPUTING An Introductory Survey	McGraw-Hill	1997					
2,	Zora Konjović	Numerički algoritmi i numerički softver	autorski rukopis	2005					
3,	Đorđe Obradović, Zora Konjović	Numerički algoritmi i numerički softver - računarski praktikum	autorski	2004					
4,	Amos Gilat	Uvod u MATLAB 7	Wiley	2005					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:								
Course id:	EM414		Optoelectronics					
Number of ECTS:	6							
Teachers:		Slankamenac P. Miloš, Živanov B. Miloš						
Course status:	e status: Elective							
Number of active tea	Number of active teaching classes (weekly)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	2	2	1	0	0			

#### Precondition courses

#### 1. Educational goal:

Acquiring basic knowledge in the field of optoelectronics, optoelectronic components, lasers (gas, solid, liquid, diodes and special), optical fibers, optoelectronic sensors, practical work on the diagnosis of optic fibers.

- 2. Educational outcomes (acquired knowledge):
- Ability to design systems with LED and laser diodes and photo detectors Ability to design physical optoelectronic communication systems Ability to design systems with displays Ability to design systems with optoelectronic sensors Ability to work with the most contemporary optoelectronic systems Ability to work on the diagnostic of optical cables with OTDR instrument
- 3. Course content/structure:

Propagation of plane waves. Basic optical properties of materials. The spectrum of electromagnetic radiation. Optical coherence and polarization. Optical sources. Fundamentals of lasers. Detectors. Noise in optoelectronics. Light emitting diodes (LED). Laser diodes. Gas lasers. Solid based lasers. Liquid lasers. Special types of lasers. Optical resonators. Propagation of light through optical fibers. Optical fiber cables and connectors. Sensors based on optical fibers. The application of optoelectronic components in communications and computers. CCD elements. Holography. Display: plasma, LC, FE, TFT. New developments in optoelectronics: quantum well lasers, integrated circuits, the recent application of the light receivers: new application of light detectors, optocouplers. Practical work on the diagnosis of optic cables.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Laboratory exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	50.00			
Laboratory exercise defence	Yes	10.00	Coloquium exam	Yes	20.00			
Lecture attendance	Yes	5.00						
Test	Yes	10.00						

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	Živanov, M.	Optoelektronika za elektroničare, skripta	Novi Sad	2006					
2,	Živanov, M. i M. Slankamenac	Optoelektronika, praktikum za vežbe	Novi Sad	2007					
3,	Milatović, D.	Optoelektronika	Svjetlost, Sarajevo	1987					
4,	Jones, K. A.	Introduction to Optical Electronic	New York, John Wiley and Sons	1987					
5,	Kressel, H.	Semiconductor Devices for Optical Communication	Berlin, Springer-Verlag	1987					
6,	S.O. Kasap	Optoelectronics and Photonics: Principles and Practices	Printece Hall	2001					

## FACULTY

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:								
Course id:	EM440	Computer-Aided Electronic Circuit Design						
Number of ECTS:	6							
Teachers: Crnojević-Bengin B. Vesna, Nađ F. Laslo, Videnović-Mišić S. Mirjana								
Course status: Elective								
Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	2	2	1	0	0			

#### Precondition courses

#### 1. Educational goal:

Acquiring basic knowledge in the field of computer-aided analog and digital electronic device and circuit design.

- 2. Educational outcomes (acquired knowledge):
- mastering basic principles of electronic circuit, component and device design
- critical analysis of existing device and circuit solutions
- selection of components based on the manufacturer's catalog data
- preparation of project documentation

#### 3. Course content/structure:

Introduction to computer-aided electronic circuit and device design. Methods and strategies of design of electronic circuits. The components of electronic circuits. Design and manufacturing of electronic devices. The rules of designing electronic circuits using computer. Options for designing chips (full-custom method, standard cells, gate matrix method. Building blocks for VLSI. Synthesis and layout design; simulation, verification and testing of electronic circuits and devices. Protection from interference in electronic devices. Analysis of the unknown final solutions of electronic circuits and devices. Computer-aided electronic circuit design. Fundamentals of microwave electronics. Scientific and technical documentation.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Consultations. Student have to finish two home works during the semester. The exam have two written parts. On third, oral part of examination will be formed the final grade. The exam can be taken through project work and defense – a prototype of electronic device or circuit instead of written examination.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandatory Points								
Computer excersise defence	Yes	30.00	Final exam - part one	Yes	20.00			
Homework	Yes	5.00	Oral part of the exam	Yes	10.00			
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	30.00			
Project	No	30.00		•				

Ond Author Title	Literature								
Ord. Author Title Publishe	er Year								
1, P. Vraneš, S. Ranđić, D. Simić, P. Marković Uvod u projektovanje VLSI kola Nauka, Beograd	1995								
2, D. Tjapkin, S. Ristić, S. Komponente i konstruisanje elektronskih uređaja 1 Nauka, Beograd	1992								
3, L.Nađ Projektovanje elektronskih uređaja – analiza postojećih rešenja elektronskih kola - skripta FTN, Novi Sad	2004								



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM444B		Applied electronics						
Number of ECTS:	6								
Teachers:		Slankamenac P. Miloš, Živanov B. Miloš							
Course status: Elective									
Number of active tead	Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	0	)	3	0	0				

#### Precondition courses

#### 1. Educational goal:

Acquiring professional knowledge in the field of applied electronics in industry, modern devices, robots, connection with the computer and optoelectronic components etc. The main objective is to prepare students for solving contemporary and complex engineering problems.

#### 2. Educational outcomes (acquired knowledge):

- ability to design and produce systems with PIC, DSP, and PLC controllers etc. - ability to design and produce measuring electronic devices - ability to design and produce devices for solving practical problems of consumer electronics - ability to design and produce robotic systems - ability to design and produce systems with optoelectronic components and sensors - ability to design and practically handle systems connecting computers and electronic systems

#### 3. Course content/structure:

Design and production of systems based on hardware and software.

Hardware includes: PC computers, computer networks, microcontrollers, DPSs, PICs, A/D and D/A converters, operational amplifiers, transistors, diodes, digital circuits, memories, sensors, video cameras, power sources, passive components, speakers, antennas, mobile phones, LC displays, optoelectronic components, thyristors and power transistors, modems etc.

Software includes: C++, Delfi, MatLab, Visual Basic, Fat Slut, Visual C++, Software for PIC emulation, Software for DSP, Processing signals (FFT etc.)

Students will get specific industrial problems in collaboration with industry. Part of the course is carried out through independent research in the field of applied electronics in industry and life. Research paper includes active monitoring of the primary technical and scientific resources, organization and experiment execution and statistical data processing, design of industrial devices, writing the paper in the field which belongs to the Master thesis topic.

Preparation of project documentation. Public project presentation and Internet project presentation.

Work is organized in teams where industry professionals will also participate.

#### 4. Teaching methods:

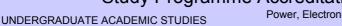
Part of the course which represents a logical whole can be passed through 2 projects (worth up to 60 points). Final examination is in the form of the exam project presentation (worth up to 30 points). Students who have a good placement in contests get extra points. Course grade is formed based on the auditory and laboratory practice attendance, student projects, and final examination. Student capabilities in solving practical problems and paper presentations are assessed in particular.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations			Mandatory	Points	Final exam Mandatory F		Points			
Laboratory exercise defence			Yes	15.00	Written part of the exam - tasks and theory Yes		30.00			
Lecture attendance			Yes	5.00				•		
Project	Project defence			50.00						
	Literature									
Ord.	Author	Title			)	Publisher		Year		
1,	Spasoje Tešić	Elektro	Elektronika - impulsna i digitalna kola			Nauka, Beograd		1992		

## STAS STUD FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNIVERSITY OF NOVI SAD



Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:									
Course id:	ESI010		Basics of control in power systems						
Number of ECTS:	6								
Teachers:		Erdeljan	Erdeljan M. Aleksandar, Bekut D. Duško, Malbaša V. Vuk						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		0	3	0	0				
Precondition courses			None						

#### 1. Educational goal:

The goal of this course is to acquire the necessary knowledge about the basics theoretical foundations of control systems ?nd their implementation in power systems.

#### 2. Educational outcomes (acquired knowledge):

Outcomes are the acquired knowledge, skills and abilities necessary for understanding the complexities of control systems and solving practical engineering problems in power systems.

#### 3. Course content/structure:

Introduction: The purpose of automatic control systems, applications, basic concepts and principles of automatic control systems. Theoretical basis for modeling and mathematical models. Mathematical models of continuous linear and nonlinear systems. The elements of control systems: sensors, control elements, actuators. The elements of the control system in power systems. Control methods: openloop control, the concept of feedback and closed-loop control, hierarchical control. Analysis and simulation of system behavior: stationary and transient response, the performance of the system. Stability and stability analysis. Elements of digital control systems. Introduction to the use of computers in control. Types of algorithms and software implementation: programable logic controllers, industrial controllers, PID controllers, complex control algorithms. Examples of control applications in power systems and smart grid systems.

#### 4. Teaching methods:

Teaching is conducted through lectures and computer exercises. During the exercises the student is required to apply their knowledge in

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Project task	Yes	15.00	Theoretical part of the exam	Yes	30.00			
Project task	Yes	15.00						
Test	Yes	10.00						
Test	Yes	10.00						
Test	Yes	10.00						
Test	Yes	10.00						

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	M. Stojić	Kontinualni sistemi automatskog upravljanja	Naučna Knjiga, Beograd	1978					
2,	B. Kovačević, Ž. Đurović	Sistemi automatskog upravljanja- zbornik rešenih zadataka	Nauka, Beograd	1995					
3,	D. Kukolj i ostali	Osnove klasične teorije automatskog upravljanja kroz rešene primere	Somel, Sombor	1995					
4,	Projektovanje sistema automatskog upravljanja u prostoru stanja	Projektovanje sistema automatskog upravljanja u prostoru stanja	Univerzitet u Novom Sadu, Novi Sad	1995					
5,	Richard C. Dorf; Robert H.Bishop	Modern Control Systems	Addison-Wesley	1974					

Strana 137 Datum: 18.12.2012

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:								
Course id:	RT50		Television and Image Processing Software 1					
Number of ECTS:	7							
Teacher:		Teslić Đ.	Nikola					
Course status: Elective								
Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
4	C	)	3	0	0			

#### Precondition courses

#### 1. Educational goal:

Students learn about designing architecture for receiving television signals, physical architecture and appropriate software support.

#### 2. Educational outcomes (acquired knowledge):

Students have learnt about basic design techniques, testing architecture and TV signal receivers. The acquired knowledge forms the basis for the future professional courses.

#### 3. Course content/structure:

Introduction (fundamentals of image transmission). Elements of physical architecture of TV set/ receiver- basic elements, realization of input element of TV set (tuner, demodulator), digitalization block, block for digital image processing (SRC, NR, ZOOM, scaling), block for image representation (CRT, LCD, Plasma), realization of the central control unit, with section for data handling (VBI, CC, TTX). Elements of TV system software (OS, HAL, MICTOS), elements of software for handling TV set input (tuner, demodulator), output, realization of sound control software (MSP), teletext software, user interface (remote control and menu system). Realization of algorithms for digital processing of television picture in real time in programmable sequential networks (OCP 1.0, OCP 2.0, 3DComb).

#### 4. Teaching methods:

Lectures. Tutorials. Auditory practice. Computer practice. Consultations.

The teaching is divided into two blocks. In the first block students attend theoretical classes during the mornings. In the afternoon they attend computer practice classes. During the second block students work on their examination papers.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points	
Homew	ork		Yes	5.00	Coloquium exam		No	20.00	
Homew	rork		Yes	5.00	Coloquium exam		No	20.00	
Homew	Homework			5.00	Theoretical part of the ex	Theoretical part of the exam		30.00	
Homew	Homework			5.00	Practical part of the exam - tasks Yes		40.00		
Test			Yes	10.00					
				Liter	ature				
Ord.	Author		Title Publisher			er	Year		
1,	V. Kovačević, N. Teslić, V. Mihić	Progra	Programska podška u televiziji i obradi slike 1, Skripte				2005		

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:								
Course id:	E23B		Fundamentals of Computer Networks 1					
Number of ECTS:	4							
Teachers:		Bašičević V. Ilija, Samardžija M. Dragan						
Course status:		Elective						
Number of active tea	ching classe	es (weekly	')					
Lectures:	Practical	I classes: Other teaching types: Study research work: Other classes:						
2	(	)	1	0	1			

#### Precondition courses

#### 1. Educational goal:

Students gain fundamental knowledge about computer networks and are able to design and realize simple communication programs.

#### 2. Educational outcomes (acquired knowledge):

Knowledge about basic notions, standards and technologies in the field of computer networks, and the ability design and realize simple communication programs.

#### 3. Course content/structure:

Basic notions and definitions (structure of computer network, types of networks, network typologies, the Internet). Communication controllers in a computer system. Network connectivity components. Software for managing network connectivity components. Physical architecture of network connectivity processors (access, passage and combined). Network connectivity processor software. Open system architecture (application layer, adjustment layer, communication layer, transport layer, network layer, channel layer, physical layer).

#### 4. Teaching methods:

Lectures: Tutorials. Computer practice. Consultations.

Students work during the semester at computer practice classes on developing their examination paper.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points
Complex exercises			Yes	20.00	Coloquium exam		No	20.00
Computer exercise attendance			Yes	5.00	Theoretical part of the ex	Theoretical part of the exam		40.00
Lecture attendance			Yes	5.00	Practical part of the exam - tasks		Yes	30.00
				Liter	ature			
Ord.	Author		Title			Publishe	er	Year
1, V. Kovačević, M. Popović i Ž. Osnovi računarskih mrež			mreža, s	kripta.			2007	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EE520		Design of Electrical Machines and Converters						
Number of ECTS:	6								
Teachers:		Čelanovi	Čelanović L. Nikola, Grabić U. Stevan, Porobić B. Vlado, Vasić V. Veran						
Course status:		Elective							
Number of active teac	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	2	2 1 0 0							
Precondition courses			None						

#### 1. Educational goal:

Acquisition of knowledge in the field of modelling of stationary and non-stationary condition and occurrences of synchronous, asynchronous and direct current machines.

#### 2. Educational outcomes (acquired knowledge):

The ability to develop a mathematical model of the synchronous machine suitable for computer aided analysis- the ability to study the stationary condition and non-stationary occurrances of the synchronous machine- the ability to develop a mathematical model for the asynchronous machine suitable for the computer aided analysis- the ability to study the stationary condition and non-stationary occurrances of the asynchronous machine- the ability to develop a mathematical model for the direct current machine suitable for computer analysis- the ability to study the stationary condition and non-stationary occurrances of direct current machines.

#### 3. Course content/structure:

Introduction. The basic mathematical model for the electrical machines. Parameters for electrical machines. Transformations of the original mathematical model for machines (C,F,H,G,D,B,E and T). Electrical machine types. Park's equations. Operation inductions (reaction) and the time constant of the synchronous machine. Stationary and quasi-stationary condition of the synchronous machine. Stationary condition of the asynchronous machine supply. Models of asynchronous machines for method of field orientation control; electricity and voltage supply; rotor flux orientation; the analogy with the direct current machine. The model of the synchronous machine for field orientation control. Simulation of non-stationary processes in direct current machines. Non-stationary processes in synchronous machines. The synchronous machine model. A three-phase short circuit of the synchronous generator. The asynchronous operation of the synchronous machine. The non-stationary condition of the motor starting process. The analysis of the asynchronous machine starting in real environment. The direct current motor, theoretical approach. Equivalent schemes of direct current machines and the stationary operating condition. The non-stationary condition.

#### 4. Teaching methods:

Classes are carried out either as lectures or as exercise classes. The lectures use modern illustrations for the intuitive understanding of the subject matter. For the full understanding of the subject matter, the auditory exercises supply examples that accompany the lectures and encourage the students to independently solve engineering problems. A part of the exercise work is carried out in the computer laboratory.

Knowledge evaluation (maximum 100 points)

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations			Mandatory	Points	Final exam		Mandatory	Points	
Comput	ter exercise attendance		Yes	5.00	Theoretical part of the ex	Theoretical part of the exam Yes			
Homew	ork		Yes	10.00			•		
Lecture	attendance		Yes	5.00					
Project			Yes	50.00					
Literature									
Ord.	Author			Title	•	Publishe	er	Year	
1,	Vladan Vučković	Opšta	teorija elektri	čnih maši	na	Nauka Beograd		1992	
2,	Ion Boldea, S.A.Nasar	Electri	c drives			CRC Press, New Y	ork	1999	
3,	L. Ćalasan, M.Petkovska		MATLAB i dodatni moduli Control System Toolbox i Simulink			Mikro knjiga, Beogr	ad	1995	
4,	D. Popović, Z. Gorečan, J. Dujić,V. Vasić, V. Perić	Model	ovanje u elek	troenerge	rtici			2011	

## FACULTY O

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:			RF and microwave engineering 1						
Course id:	EK322								
Number of ECTS:	7								
Teacher:		Crnojević	Crnojević-Bengin B. Vesna						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	3	3 0 0 0							
Precondition courses			None						

#### 1. Educational goal:

Students will gain fundamental knowledge needed to work in the field of RF and microwave engineering. They will learn about the propagation of electromagnetic waves and phenomena that occur in components, circuits and systems that operate above 1 GHz.

#### 2. Educational outcomes (acquired knowledge):

Fundamental theoretical knowledge about propagation of electromagnetic waves and specific characteristics of components, circuits and systems that operate at frequencies above 1 GHz. Capability to understand principles of operation, potentials and limitations of components and circuits used in the state-of the-art and next-generation wireless systems. The acquired knowledge will be used in the engineering practice as well as in further education, in courses RF and microwave engineering 2, Design of communication systems, Design of radio systems, Fundamentals of radio communications, and during master and PhD studies.

#### 3. Course content/structure:

Fundamentals of electromagnetic theory. Maxwell's equations. Interaction of EM waves and materials. Electromagnetic characteristics of materials. Propagation of electromagnetic waves. Power and energy. Polarization. Reflection and transmission. Electromagnetic theorems and principles (duality theorem, theory of images). Transmission line theory. Practical realizations of transmission lines that operate at high frequencies (planar transmission lines, waveguides, surface integrated waveguides). Analysis of microwave networks. Z, Y, ABCD and S matrices. Microwave measurements and characterization. Phenomena of resonance. Resonators. Practical realizations of resonators.

#### 4. Teaching methods:

Lectures. Auditory excercizes. Laboratory excercizes

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Exercise attendance	Yes	5.00	Theoretical part of the exam	Yes	30.00			
Homework	Yes	5.00	Practical part of the exam - tasks	Yes	40.00			
Homework	Yes	5.00						
Homework	Yes	5.00						
Homework	Yes	5.00						
Lecture attendance	Yes	5.00						

## Literature

Ord.	Author	Title	Publisher	Year
1,	D.M. Pozar	Microwave Engineering	John Wiley & Sons	2010
2	Vesna Crnojevic-Bengin	RF i mikrotalasna tehnika - skripta		2011

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM402		Algorithms and Complexity						
Number of ECTS:	6								
Teacher:		Novak O. Ladislav							
Course status:		Elective							
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		1	2 0 0						
Precondition courses			None						

#### 1. Educational goal:

Providing a general overview of fundamental aspects of algorithm theory and their complexity including algorithm examples from different fields of electrical and computer engineering.

#### 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will gain an insight in the basic concepts of algorithm theory and their complexity which include:

- understanding the algorithm concept, classification of problems and algorithms, methods to prove algorithm solves each instance of the analyzed problem and complexity assessment.
- compendium of problems in electrical and computer engineering

#### 3. Course content/structure:

Problems and algorithmic solutions, alphabets and languages, machines and elementary operations, asymptotic notations, analysis of algorithms, algorithm techniques, concept of algorithmic complexity. Complexity classes and relations between complexity classes, reduction and completeness, P, NP and co-NP classes.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Computer exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00			
Lecture attendance	Yes	5.00						
Test	Yes	20.00						
		Liter	rature					

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	L. Novak	Algoritmi i njihova složenost - skripte	FTN Novi Sad	2007				
2,	Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein	Introduction to Algorithms	The MIT Press	2009				
3,	Herbert S. Wilf	Algorithms and Complexity	A K Peters/CRC Press	2002				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM456		Computers in the supervisory and control systems						
Number of ECTS:	6								
Teachers:		Slankam	Slankamenac P. Miloš, Tomić J. Josif						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	)						
Lectures:	Practical	Il classes: Other teaching types: Study research work: Other classe							
3		)	3 0 0						
Procondition courses		-							

#### Precondition courses

#### 1. Educational goal:

Acquiring basic knowledge of computer applications in the realization of supervisory and control systems. Introduction to the work of programmable logic controllers and their hardware and software architecture. Gaining knowledge of HMI and SCADA systems, the basic structure, application, parts. Gaining basic knowledge of industrial networks and protocols. Student mastery of modern technologies and development trends in the area of systems management. Acquiring knowledge in designing systems based on computers. Mastering the students to the realization of the SCADA system.

#### 2. Educational outcomes (acquired knowledge):

Knowledge of implementation computers in the supervisory and control system design and operating principles of programmable logic controllers. The capability of understanding the principles and implementation of SCADA systems and SCADA software. Knowledge of data processing, alarms and events in the SCADA system. Training for the implementation of a simple SCADA system.

#### 3. Course content/structure:

Computers in the implementation of supervisory and control systems. Programmable Logic Controllers. Introduction to HMI and SCADA systems. Elements of SCADA systems. Application of SCADA systems in the industry. Design of SCADA software. Introduction to SCADA systems (typical industrial applications, I / O modules, data sharing, alarms, data logging, industrial graphics, protection of SCADA systems, tools for creating applications). Industrial networks and protocols (EIA-232, EIA-485, Modbus, Data Highway protocol, industrial Ethernet protocol, HART, Profibus protocol, TCP-IP, radio and wireless protocols). Making SCADA applications (data sharing between stations, integrating hardware components in SCADA systems, understanding of client-server information exchange, static and dynamic I / O modules). Access to the data (project libraries, I / O servers, sharing events, create online library events). HMI interface (HMI interface implementation, graphics industrial automation, implementation of protective structures, tools for data processing and alarm, control variables, creating front panel). Alarm and event processing (understanding of the origin of alarms and events, data transmission of alarms and events, creating LabVIEW programs to process alarms and events, system events and alarms, alarm processing, event-driven programming. Data logging (data collection, view data in real time, a chronological overview of the data, working with databases, data integrity protection. Practical realization of a simple SCADA system.

#### 4. Teaching methods:

Lectures, auditory exercises, laboratory exercises, consultation.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations	Mandatory	Points	Final exam		Mandatory	Points					
Laboratory exercise defence			Yes	40.00	Written part of the exam	Written part of the exam - tasks and theory		30.00				
Test	Test			10.00	Coloquium exam	Coloquium exam Yes		20.00				
				Liter	ature							
Ord.	Author			Title	;	Publishe	er	Year				
1,	Stuart Boyer	Scada				The Instrumentation and Automation Social		2009				

## RESTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			High Malta na Euroina agina						
Course id:	EE409		High Voltage Engineering						
Number of ECTS:	5								
Teacher:		Nimrihter	mrihter D. Miroslav						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	3	0 0 0						
Precondition courses			None						

#### 1. Educational goal:

The basic course objective is acquiring knowledge about the impact of high voltage on dielectric and the environment, acquiring knowledge about preventive actions which should enable protection of human lives and material goods from the dangers of high voltage in the power electric system. Mathematical models of high voltage transient phenomena and application of technical means specific for high voltage engineering are also the goals of this course.

#### 2. Educational outcomes (acquired knowledge):

The knowledge of all types, causes and mathematical modeling of over voltage phenomena, the knowledge of all types of dilect rics and processes of dielectric breakdown under the influence of over voltage phenomena, as well as protection from creation and transfer of dangerous over voltage, the knowledge of procedures for the isolation maintenance of the high voltage devices.

#### 3. Course content/structure:

Over voltage. Propagation of over voltage waves. The behavior of gaseous, liquid and solid insulation in the presence of volt age. Protection of human life. Machinery and equipment protection against dangerous consequences of over voltage phenomena. Over voltage arresters. Classical and statistical insulation coordination. Management of the PES elements – preventive maintenance of dielectrics (partial discharge).

#### 4. Teaching methods:

Lectures; Auditory Practice

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Lecture attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00					
Term paper	Yes	20.00	Oral part of the exam	Yes	35.00					
Test	Yes	10.00								

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	E. Kuffel, W. Zaengl	High Voltage Engineering: Fundamentals	ELSEVIER NEWNES, Oxford	2000						
2,	M. Nimrihter	ODABRANA POGLAVLJA IZ TEHNIKE VISOKOG NAPONA	U PRIPREMI	2007						
3,	Milan Savić	Tehnika visokog napona	ETF, Beograd	1996						

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering

Pitman Publishing

Marcel Dekker, New Your

2001

1999



## Table 5.2 Course specification

Course:		Davier Ovetera Daliebility							
Course id:	EE413		Power System Reliability						
Number of ECTS:	5								
Teacher:		Nimrihter	nrihter D. Miroslav						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	3	0 0 0						
Precondition courses			None						

#### 1. Educational goal:

The main course objective is acquiring knowledge about reliability/risk evaluation and control in economically justified way, in power, distribution and industrial systems. Risk evaluation in the past and risk forecast in the future. Methods for making decisions for minimizing risk for supplying consumers.

#### 2. Educational outcomes (acquired knowledge):

The knowledge of the risk concept and mathematical models for evaluation of economic aspects of risk in power systems, analysis and evaluation of events from the past. The knowledge of system elements aging and causes of failure. Costs due to sudden and planned failures. Knowledge of stochastic processes for prediction of future risk in power, distributed and industrial systems (power plants, transformers, power lines, automatic devices).

#### 3. Course content/structure:

Risk management for failures (impact of equipment usage duration on the risk of failure, preventive and corrective maintenance, financial consequences of failures and maintenance of entire operating costs). The assessment of economic risk indicators due to element failure of PES (mathematical modeling of the failure causes and failure consequences, controlling bodies and failure caused costs on the free electricity market). Management decision-making: implicit and explicit economic decision-making in production, transmission and distribution systems.

#### 4. Teaching methods:

Lectures, Auditory practice.

R. Billinton, R. Allan

H. Lee Willis

	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations		Mandatory	Points	Final exam		Mandatory	Points				
Lecture attendance		Yes	5.00	Written part of the exam	Written part of the exam - tasks and theory Y		30.00				
Term paper			Yes	20.00	Oral part of the exam		Yes	35.00			
Test	Test		Yes	10.00							
				Liter	ature						
Ord.	Author			Title	)	Publisher		Year			
1,	Wenyuan Li	Asses Applic		ver Syster	ms-Models, Methods and	IEEE PRESS		2002			

Reliability Evaluation of Power Systems

Aging Power Delivery Infrastructures



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:			_						
Course id:	EE411B		Exploitation of PES						
Number of ECTS:	6								
Teacher:		Sarić T. A	Andrija						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3		)	2	0	1				
Precondition courses			None						

#### 1. Educational goal:

The course objective is to give students insight into the fundamental aspects of power energy systems (PES), methods and algorithms for optimizing exploitation problems of production and transmission capacities in PES. Apart from that, the objective is to enable students to solve practical problems of managing PES through dispatching management and make decisions on plant optimization. Since most of the PES exploitation problems are mathematically very complex, one of the objectives is also to teach students how to use available readymade programme packages for plant optimization through PES management (EMS – Energy Management System). Also one of the objectives is examination of the influence of power energy market deregulation on the process of optimal PES exploitation.

#### 2. Educational outcomes (acquired knowledge):

In the end of the course, students will be able to: Consider the fundamental technical and economical characteristics of the most important elements of PES: production units (hydro and thermal power plants), transmission and distribution network (lines and transformers), consumption areas and new and renewable sources of energy; Model certain physical effects which happen under some exploitation conditions; Formulate and solve basic analytical functions of PES exploitation; Use programme packages for optimization and simulation of dispatching management in real production and transmission networks; Reach necessary conclusions on the basis of the obtained results for the purpose of PES exploitation optimization.

#### 3. Course content/structure:

- Energy and exploitation features of consumers:

Diagrams and curves of load duration. Diagram division. Characteristic indicators. Approximation of duration curve. Weekly, monthly and annual diagrams and curves of load duration.

-Energy and exploitation features of hydro power plants.

Hydrograph and curve of discharge duration. Modelling of hydro turbines and hydro power units. Plant limitations. Energy features of hydro power units. Calculations of power and hydro power plants energy. Possible production. Costs of production in hydro power plants (investments and exploitation, costs of the plant, maintenance and fuel).

- Energy and exploitation features of thermal power plants.

Fundamental energy features of thermal power plants, gas-turbine power plants, combined cycle plants. Production costs in thermal power plants (investment, exploitation, costs of plant, maintenance and fuel).

-New renewable power sources.

Wind power plants. Photo voltage power plants. Biomass power plants. Other new and renewable power sources.

-PES safety

Failure classification. Models for approximate evaluation of failure effects. Sensitivity method in failure analysis. Calculation of sensitivity coefficient by DC model.

-Economic aspects of PES exploitation.

Specification of problems related to operation of power units. Function of plant costs. Limitations. Optimal load distribution in thermal and hydro-thermal systems (economic dispatching). Loss coefficients and loss formula. Hydro-thermal coordination.

-Optimal power flow.

Specification of goal and limitation function. Solution method: 1) Researching method, 2) Gradient method, 3) Newton method and 4) Method of separable linear programming

-Basic definitions on regulation of frequency and active powers.

Types of regulation. Requirements for keeping frequency. Time decomposition of functions. Primary regulation of frequency and active powers. Stationary error of frequency divergence in primary regulation. Notion of automatic second

#### 4. Teaching methods:

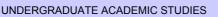
Teaching: classic lectures and board exercises. Knowledge testing: Partial examinations and the final examination. Final examination: written part (students who successfully pass two partial examinations are exempt from the written part of the final examination) and oral part of examination.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points Final exam Mandatory F											
Lecture attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	65.00						
Test	Yes	10.00									
Test	Yes	10.00									
Test	Yes	10.00									



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



	Literature							
Ord.	Author	Title	Publisher	Year				
1,	M. S. Ćalović, A. T. Sarić i P. Č. Stefanov	Eksploatacija elektroenergetskih sistema u uslovima slobodnog tržišta	Tehnički fakultet, Čačak	2005				
2,	M. S. Ćalović i A. T. Sarić	Zbirka rešenih zadataka iz eksploatacija elektroenergetskih sistema, Drugo dopunjeno i prošireno izdanje	Tehnički fakultet, Čačak	2006				
3,	D. Popović, D. Bekut i V. Treskanica	Specijalizovani DMS algoritmi	DMS grupa, Novi Sad	2004				
4,	G. Švenda	Osnovi elektroenergetike – matematički modeli i proračuni	Fakultet tehničkih nauka i Stylos, Novi Sad	2008				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:		Distribution Naturals Analysis and Management								
Course id:	EE415A		Distribution Network Analysis and Management							
Number of ECTS:	7									
Teacher:		Popović:	S. Dragan							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	2	2	0 0 0							
Precondition courses			None							

#### 1. Educational goal:

To study basic principles and methods of exploitation, management and control of distribution networks (DN), modern tools for solving particular practical problems and the impact of deregulated market of electricity on DN management

#### 2. Educational outcomes (acquired knowledge):

Introduction to basic models for certain problems of analysis and DN management. Analytical methods and program tools for solving problems of analysis and DN management. Solving the stated problems in real DN.

#### 3. Course content/structure:

Basic problems of DN analysis and management. Automatic control systems. Types and equipment in the control centers. control systems DN – DNS (description, structure, analytical power functions etc.).

Calculation of the power flow and DN state estimation. Calculation of failure regime (short circuits and conductor interruptions). Voltage regulation and reactive power: Systems for reactive power compensation. Voltage regulation methods. Voltage regulation through transformer with regulation in the load and non-load state. Analysis of losses and reliability in distribution networks.

#### 4. Teaching methods:

Lectures; Auditory Practice; Consultations.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandatory Points Final exam Mandatory Point										
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	35.00					
Lecture attendance	Yes	5.00	Oral part of the exam	Yes	35.00					
Term paper	Yes	20.00								

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	V.Strezoski, D.Janjić	Sistem regulacije napona radijalnih distributivnih mreža	FTN i EPS – JP Elektrovojvodina – Novi Sad	1997					
2,	D. Popović, D. Bekut i V. Treskanica	Specijalizovani DMS algoritmi	DMS Group, Novi Sad	2004					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



### Table 5.2 Course specification

Course:			Control of Electrical Drives						
Course id:	EE427	]							
Number of ECTS:	4								
Teacher:		Jeftenić I	eftenić I. Borislav						
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	2	2	0 0 0						
Precondition courses		None							

#### 1. Educational goal:

Introduction to closed loop control of DC and AC electrical drives. Understanding of various control techniques. Design of electric drive controllers. Controller synthesis with an objective to obtain optimal process response.

#### 2. Educational outcomes (acquired knowledge):

After completing the course, the students are expected to: 1. Know the essential control principles of most common electric drives. 2. Define control algorithm of an electric drive based on a requirement specification and assure the safe operation of the system. 3. Make a dynamic model of electric drive system including a simple mechanical system and a simple model of a power electronic converter. 4. Use synthesis methods for tuning of linear controllers. 5. Optimize the adjustment of the controllers in the cascade control system with an objective to obtain optimal process response. 6. Make measurements to analyze electrical machines and drives operation.

#### Course content/structure:

Elements of controlled electric drive system. Basic closed loop topologies of electrical drives. Basic types of controllers. P, PI, PID controllers. Methods of current, speed, torque and position control. Cascade control structure. Performance criteria of the control system. Transfer functions of drive systems. Controller synthesis for first and second order systems. Quality and dynamic performances of control system. Analog and digital controller design. Control of power electronic converters and electric drives. Synthesis and controller design for a DC motor. Implementation of a scalar controlled induction motor drives. Design of controlled current induction motor drive systems. Synthesis and controller design for vector-controlled induction motor drive systems. The influence of motor parameters on the performance of the vector controlled electric drive. Direct torque control for induction motor drives. Synchronous motors in electric motor drive.

#### 4. Teaching methods:

Lectures, Exercises.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	70.00				
Homework	Yes	5.00							
Homework	Yes	5.00							
Homework	Yes	5.00							
Homework	Yes	5.00							
Lecture attendance	Yes	5.00							

	Literature							
Ord.	Author	Title	Publisher	Year				
1,	V. Vučković	Električni pogoni	Akademska misao, Beograd	2002				
2,	B. Jeftenić, V. Vasić, Đ. Oros	Regulisani elektromotorni pogoni - rešeni problemi sa elementima teorije	Akademska misao, Beograd	2004				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:								
Course id:	EK462		Entrepreneurship in ICT					
Number of ECTS:	4							
Teacher:		Šenk I. V	enk I. Vojin					
Course status:		Elective						
Number of active tead	hing classe	es (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2		1	1 0 0					
Precondition courses		None						

#### 1. Educational goal:

Introduction to the methods of starting the new business in the field of information-communication technologies.

- 2. Educational outcomes (acquired knowledge):
- ability to make a successful business plan
- ability to successfully establish and manage personally owned business
- 3. Course content/structure:
- projection of the information-communication technology development in the next 10 years
- features of the business establishment in the field of dynamic development relying on the big investments and innovation
- market research for new products
- business plan structure and its constituent elements (Resume, Technology Description, Business description, Market analysis, Competition analysis, Business strategy, Business process, Marketing plan, Action plan, Financial plan, Risks and ways for overcoming them)
- practical advice for newly established business management in the field of information-communication technologies
- 4. Teaching methods:

Lectures. Consultations.

	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final exam Mandatory Points			Points	
Lecture	attendance		Yes	5.00	Oral part of the exam		Yes	30.00	
Project defence			Yes	45.00					
Term paper			Yes	20.00					
				Liter	ature				
Ord.	Author			Title	;	Publishe	er	Year	
1,	Vojin Šenk	Preduzetništvo u informacior tehnologijama (skripta)			o komunikacionim	FTN, Novi Sad		2007	
2,	V. Bojović, V. Šenk, V. Rašković, M. Stanču- Mirosayliev.			preduzet	nike	Konekta konsalting		2007	

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering

Stylos, Novi Sad

1999



#### Table 5.2 Course specification

Course:					
Course id:	EE416			Relay Protection	
Number of ECTS:	7				
Teacher:		Bekut D.	Duško		
Course status:		Elective			
Number of active tead	hing classe	es (weekly	)		
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:
3	3	3	0	0	0
Precondition courses			None		

#### 1. Educational goal:

Acquiring basic knowledge about principles of relay operation and basic protection in power systems.

Relejna zaštita

- 2. Educational outcomes (acquired knowledge):
- good knowledge of principles for protection functioning
- ability to understand principles of relay operation
- ability to understand principles of relay protection operation
- ability to understand rules of relay adjustment

#### 3. Course content/structure:

Duško Bekut

Introduction. Basic requirements for the relay protection. Basic classification of relays. Current relays. Voltage relays. Power relays. Distant relays. Microprocessor relays. Adaptive relays. Fuses. Electric network protection. Transformer protection. Generator protection. Engine protection. Collector protection.

#### 4. Teaching methods:

Lectures; Auditory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations		Mandatory	Points	Final exam Manda		Mandatory	Points		
Exercise attendance			Yes	5.00	Written part of the exam	- tasks and theory	Yes	35.00	
Lecture attendance			Yes	5.00	Oral part of the exam Yes 3		35.00		
Term pa	aper		Yes	20.00					
	Literature								
Ord. Author				Title	)	Publishe	er	Year	

## FACULTY OF TEC

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:			Energy Convertor Control					
Course id:	EE425	]	Energy Converter Control					
Number of ECTS:	4							
Teachers:		Čelanovi	Čelanović L. Nikola, Grabić U. Stevan, Gušavac J. Strahil					
Course status:		Elective						
Number of active tea	ching classe	es (weekly	')					
Lectures:	Practical	classes:	classes: Other teaching types: Study research work: Other classes:					
2		1	1 0 0					

#### Precondition courses

#### 1. Educational goal:

Basic course objective is to acquire knowledge about techniques of power electronic converter control, analysis of all elements in the controlled structure of the device, their modeling, calculation of the controller parameters, simulation of the device operation and finally entering and adjusting parameters in the real system and checking the obtained results. The goal is to unite these elements into a specific system of the power converter for the application in electromotor drives and elsewhere.

#### 2. Educational outcomes (acquired knowledge):

Students are trained to know the methods of energy converter control, methods of control system analysis, methods and tools for converter modeling and to acquire the ability to measure properties on the specific devices and test their performance, and apply such device in the modern electromotor drives.

#### 3. Course content/structure:

Introduction. Basic components of management-control circuits. Sensors and adjusting circuits. Working principles and selection of control circuits. Structure and programme realization of digital control circuit. Management in electromotor drives – principles, methods, hardware. Management-control circuit for phase controlled converters. Principles, types and classification techniques of pulse-width modulation (PWM). Management-control circuits for power converters with PWM control (PWM chopper, PWM inverter). Modulation of space vector. Inverter control in the drive with electric machine and inverter connected to the electrical network. U/F, scalar, vector control. Alternating converter control.

#### 4. Teaching methods:

The course consists of the presentation of theoretical operation and design principles in the lectures, through practical work in the laboratory and independent work on designing the given project.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Homework	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00				
Homework	Yes	5.00							
Laboratory exercise attendance	Yes	5.00							
Laboratory exercise defence	Yes	30.00							
Lecture attendance	Yes	5.00							
Test	Yes	10.00							
Test	Yes	10.00							

	Literature						
Ord.	Author	Title	Publisher	Year			
1,	Vladimir Katić	Upravljanje energetskim pretvaračima	FTN - skripta	2007			
2,	William Shepherd	Power Electronics and Motor Control	CRC Press, ISBN 0824750543	2004			

## LANAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:								
Course id:	EE417A			Databases				
Number of ECTS:	3							
Teachers:		Luković S	uković S. Ivan, Mihajlović R. Dragan					
Course status:		Elective						
Number of active tea	ching classe	es (weekly	r)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2		0	2 0 0					
Precondition courses		None						

#### 1. Educational goal:

Basic students' education in databases. Students gain fundamental knowledge in databases and learn basic techniques of implementation, use and maintenance of databases.

#### 2. Educational outcomes (acquired knowledge):

The acquired knowledge is used in practice, in projects of database and information system development, as well as in advanced courses requiring a use of basic knowledge in databases.

#### 3. Course content/structure:

The evolution of data management process and the notion of a database. Basic concepts and characteristics of data models. ER data model. Relational data model. A classification and types of database constraints in the relational data model. Functional dependency and the relation scheme key. Basic design techniques of relational database schemas. Basic characteristics of database management systems. The use of SQL in creating database schemas and data manipulation.

#### 4. Teaching methods:

Teaching is performed through lessons, oral and computer exercises (in the computer classroom), as well as consultations. Through the teaching process, students are constantly motivated to an intensive discussion, problem oriented reasoning, independent study work and active participation in the whole lecturing process. The prerequisite to enter final exam is to complete all the pre-exam assignments by earning at least 30 points.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Complex exercises	Yes	10.00	Oral part of the exam	Yes	30.00			
Complex exercises	Yes	10.00						
Complex exercises	Yes	10.00						
Complex exercises	Yes	10.00						
Project task	Yes	15.00						
Project task	Yes	15.00						

		Literature		
Ord.	Author	Title	Publisher	Year
1,	Mogin Pavle, Luković Ivan	Principi baza podataka	Fakultet tehničkih nauka, Novi Sad	1996
2,	Mogin Pavle, Luković Ivan, Govedarica Miro	Principi projektovanja baza podataka, II izdanje	Fakultet tehničkih nauka, Novi Sad	2004
3,	Date C. J.	An Introduction to Database Systems (8th Edition)	Addison Wesley	2004
4,	Mihajlović Dragan	Informacioni sistemi i projektovanje baza podataka	Fakultet tehničkih nauka, Novi Sad	1998
5,	Groff, James R., Weinberg, Paul N., Oppel, Andrew J.	SQL: The Complete Reference, 3rd Edition	McGraw-Hill, Inc.	2009

# TO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication
Engineering



### Table 5.2 Course specification

Course:								
Course id:	EE424A	Power Electronic in Drive and Industry						
Number of ECTS:	5							
Teachers:	Porobić B. Vlado, Vasić V. Veran							
Course status:		Elective						
Number of active tea	ching classe	es (weekly	<b>'</b> )					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
2	(	0	0					
Precondition courses			None					

#### 1. Educational goal:

The basic course objective is to acquire knowledge related to the application of power electronics in industrial drives, analysis of the electromotor drive structures, types of measuring and sensor equipment, programmable logic controllers and monitoring systems.

- 2. Educational outcomes (acquired knowledge):
- the knowledge of the types of power electronics converters and methods of analysis of their operation
- the knowledge of the acquisition techniques and signal processing in industrial environment
- the knowledge of the control methods and industrial process management

#### 3. Course content/structure:

Introduction. Design of power electronics devices for drive and industry. Place and importance of power converter and drive modeling. Classification of simulation tools. Methods of power electronics system simulation in regulated drives. Methods of power converter modeling. Idealization and approximation. General types of converters. Place and importance of power electronic devices in drives. Alternating machines in industry. Pulse width modulation techniques. Scalar and vector control. General characteristics of frequency controllers. Sensors in industry. Types. Programmable logic controllers. Industrial networks. Monitoring and acquisition systems. Procedure of making the device. Packaging and protection. Radiation and higher harmonics-electromagnetic compatibility (EMC). Technical documentation. Standards and testing.

#### 4. Teaching methods:

Lectures and laboratory practice are focused on introduction to and independent handling of contemporary elements of industrial automation. A visit to the factories is planned in order to fully understand the theoretically taught and practically tested matter.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations Mandatory Points Final exam Mandatory										
Complex exercises	Yes	60.00	Oral part of the exam	Yes	30.00					
Laboratory exercise attendance	Yes	5.00								
Lecture attendance	Yes	5.00								

## Literature Ord. Author Title Publisher Year 1, V.Vasić, Đ. Oros Energetska elektronika u pogonu i industriji FTN, Novi Sad 2012 2, B.Dokić Energetska elektronika-pretvarači i regulatori ETF – Banja Luka 1999

# TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



### Table 5.2 Course specification

Course:									
Course id:	EE419A		I estinç	g of electrical machines					
Number of ECTS:	6								
Teacher:		Oros V. Đura							
Course status:		Elective	Elective						
Number of active teac	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	C	0 3 0 0							
Precondition courses			None						

#### 1. Educational goal:

The main course objective is to acquire knowledge about electric machines, their characteristics and methods of measurement and testing.

- 2. Educational outcomes (acquired knowledge):
- the knowledge of all types of electric machines
- the knowledge of methods for recording characteristics
- the knowledge of methods and tools for checking parameters of electric machines

#### 3. Course content/structure:

Introduction (Basic types of testing. Testing during the production process, final testing. Official written documents during electric machine testing. General-visual machine examination.) Measuring the non-electric properties (temperature, velocity, momentum). Testing the transformator. (Routine and type tests. Tolerance. Checking the ferromagnetic core and oil. Measurement of winding resistance and checking the end marks and types of feedback. Short circuit experiment. Idling experiment. Dielectric strength experiment. Heating experiment.) Testing the asynchronous machines. (Routine and type testing. Tolerance. Idling experiment. Testing during the short circuit. Load method. Dielectric strength experiment. Determining mechanical properties.) Testing the synchronous machines. (Testing during production. Anchoring test. Idling experiment. Short circuit experiment. Properties of reactive load, regulation and external properties. Determining the reactance. Determining the changes of voltage and excitation current. Determining losses and efficiency.) Testing of DC machines. (Measurement of winding resistance. Determining the neutral zone. Idle testing. Commutation check-up. Determining losses and efficiency.) Testing of electrical generators.

#### 4. Teaching methods:

Lectures are held using the modern learning resources. Testing the required knowledge before practice. Laboratory Practice-where students get the problem in advance and approach testing of el. Machines. Laboratory practice is assessed and the grade has an impact on the final course grade.

Knowledge evaluation (maximum 100 points)										
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points					
Laboratory exercise defence	Yes	40.00	Oral part of the exam	Yes	30.00					
Test	Yes	10.00								
Test	Yes	10.00								
Test	Yes	10.00								

		Literature		
Ord.	Author	Title	Publisher	Year
1,	R. Wolf	Ispitivanje električnih mašina	Školska knjiga	2000
2,	M. Petrović	Ispitivanje električnih mašina	Naučna knjiga	2000

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EJE6		English Language - First Certificate 2							
Number of ECTS:	2									
Teachers:	Teachers:  Bogdanović Ž. Vesna, Gak M. Dragana, Katić M. Marina, Ličen S. Branislava, Mirović Đ. Ivana, Šafra F. Jelisaveta									
Course status:		Elective								
Number of active tea	ching classe	es (weekly	r)							
Lectures:	Lectures: Practical classe		Other teaching types:	Study research work:	Other classes:					
2 0			0 0 0							
B ""										

#### Precondition courses

#### 1. Educational goal:

To further master and develop all language skills at the B2 level of Common European Framework of Reference for Languages within this course. Mastering the vocabulary and grammar covered by the course and the second part of the planned literature.

#### 2. Educational outcomes (acquired knowledge):

Students are able to read, write, listen and speak at the level which approximates the B2 level of the Common European Framework of Reference for Languages. They possess rich vocabulary related to the topics covered within the course (the second part of literature) and use it adequately. They are confident in using grammar defined for this level.

#### 3. Course content/structure:

Grammar is covered by literature for this course at the B2 level of the Common European Framework of Reference for Languages. Vocabulary is related to topics covered by literature. Development of all language skills at this level within the given literature (the second part of the textbook).

#### 4. Teaching methods:

The emphasis is placed on student activities during the class, their interaction with the teacher and between themselves. The communicative approach is used in the foreign language lectures.

	Knowledge evaluation (maximum 100 points)										
	Pre-examination obligations Mandatory Points Final exam Mandatory Point										
Test		Yes	10.00	Written part of the exam - tasks and theory	Yes	40.00					
Test		Yes	10.00	Oral part of the exam	Yes	30.00					
Test		Yes	10.00								

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	Simon Haines and Barbara Stewart	First Certificate Masterclass(units 7-12)	Oxford University Press	2000					
2,	Simon Haines and Barbara Stewart	First Certificate Language Practice	Oxford University Press	2000					
3,	Grupa autora	Oxford English - Serbian Dictionary	OUP	2006					

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:	_								
Course id:	E1SP1L		Pr	ofessional Practice					
Number of ECTS:	2								
Teachers:									
Course status:		Elective							
Number of active tead	ching classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
0	(	)	0	0	3				
Precondition courses			None						

#### 1. Educational goal:

Acquiring direct knowledge about activities and organization of companies and institutions dealing with profession chosen by the student and possibilities of application of previously acquired knowledge in practice.

#### 2. Educational outcomes (acquired knowledge):

Enabling students to apply previously acquired theoretical and professional knowledge for solving specific practical engineering problems within the chosen company and institution. Introducing students to the activities of the chosen company or institution, to the ways of doing business, management and place and role of the engineer in their organizational structures.

#### 3. Course content/structure:

It is created individually for each candidate, in agreement with the company or institution management where professional practice is taking place, and in accordance with the needs of profession for which the student is being trained.

#### 4. Teaching methods:

Consultations and professional practice journal writing where the student describes activities done during the professional practice.

	Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations Mandatory Points Final exam Mandatory Points									
	Literature									
Ord.	Ord.   Author   Title   Publisher   Year									



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:										
Course id:	E1DR1		Preparation and Defence of Graduate Thesis							
Number of ECTS:	12									
Teachers:										
Course status:		Elective	Elective							
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
0	(	)	0	0	10					
Precondition courses			None							

#### 1. Educational goal:

Application of basic acquired knowledge and methods in solving practical problems within the selected area. Students investigate the problem, its structure and complexity, and based on conducted analysis, they draw conclusions on the possible modes of solving. Researching the literature, students are introduced to the methods for solving similar tasks, and the practice in their solving. Obtaining the knowledge on modes, structure and form of writing a report after the conducted analyses and other activities within the set topic of the final thesis. By elaborating the final thesis, students acquire experience for writing their theses where it is necessary to describe problems, conducted methods and procedures, as well as results obtained. Furthermore, the objective of elaborating and defending the final thesis is to develop the ability to use the results of individual work and prepare it in an adequate form to be publicly presented.

#### 2. Educational outcomes (acquired knowledge):

Enabling students for individual application of the previously obtained knowledge in diverse fields being studied in order to observe the structure of the set problem and approach the systematic analysis to draw conclusions on possible directions of its solving. By individually using the literature, students expand their knowledge in the selected field and research diverse methods and theses related to similar problems. By individually researching and solving tasks in the given area, students acquire knowledge on the complexity of the problems in their professional field. By elaborating the graduate thesis, students acquire certain experiences that can be applied in practice while solving problems in their professional field. By preparing the results for public defence, in the public defence and on answering questions and comments presented by the committee, students acquire necessary experience on the manners of practically presenting results of an individual or team work.

#### 3. Course content/structure:

Formed for each student in particular, in accordance with the demands and the area enclosed within the set task of the final thesis. The student, in agreement with the mentor, completes the final thesis in the written form in accordance with the regulations of the Faculty of Technical Sciences. The student prepares and defends the written final thesis in public, in agreement with the mentor and in accordance with the prescribed standards. Student researches the professional literature, specialization and final thesis dealing with the same topic, performs analyses in order to find the solution to the concrete task defined in the task of the final thesis.

#### 4. Teaching methods:

The mentor of the final thesis sets the task of the final thesis and presents it to the student. Student is obliged to elaborate the final thesis within the set task defined in the task of the graduate thesis. During the elaboration of the final thesis, mentor can provide additional instructions to the student, direct to certain literature and additionally direct in order to have a more qualitative final thesis. Within the theoretical part of the final thesis, student has consultations with the mentor, and if needed, with other teachers dealing with the topics related to the topic of the graduate thesis. Within the set topic, if needed, student can conduct certain measuring, researching, counting, surveying and the like, if it is predicted by the final thesis task. Student completes the final thesis and on obtaining the agreement of the committee for evaluation and defence, provides bounded copies to the committee. The defence of the graduate thesis is public, and the student has the o

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points Final exam Mandatory Points											
Writing the final paper with theoretic basis	Yes	50.00	Final exam defence	Yes	50.00						

# THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			_						
Course id:	El408		Project Management						
Number of ECTS:	4								
Teachers:		Sovilj M.	Sovilj M. Platon, Župunski Ž. Ivan						
Course status:		Elective	Elective						
Number of active tead	ching classe	es (weekly	r)						
Lectures:	Practical	Practical classes: Other teaching types: Study research work: Other classes:							
2	(	)	2 0 0						
Precondition courses		None							

#### 1. Educational goal:

The acquisition of knowledge in project management, especially project management in electrical engineering and computer science.

#### 2. Educational outcomes (acquired knowledge):

understanding of the importance of project management, understanding the various methodologies of project management, the ability to work in project teams in the role of project manager, as well as other project roles, the ability to search the literature and other forms of information in the field of project management and capability of presentation of research results;

#### 3. Course content/structure:

The importance of project management. The application of project management in different parts of business. The application of project management in the electrical engineering and computer science. Basic concepts and definitions of project management. The role of the project manager. < PMBOK and other project management methodologies. The process of initiating projects. Assessing the feasibility of the project. Project Planning. Defining the project goals. Project scope and exclusions. The project outcomes. Analysis of required resources and stakeholders. Critical success factors of the project. Project communication plan. Plan of changes. Quality Management Plan for the project. Risks in project management. Analysis of the structure of work (WBS). Creating a project team. Metrics, and evaluation of the accuracy of the project. Network diagrams. CPM and PERT method. Gantt charts. Phases of execution, control and supervision of the project and the conclusion. Microsoft Project as a software project management tool.

#### 4. Teaching methods:

Lectures, auditory exercises, labaratory exercises, consultations.

	Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points					cam	Mandatory	Points					
Laboratory exercise defence Yes 20.0			20.00	Written part of the exam	tasks and theory	Yes	30.00					
Project			30.00	Oral part of the exam		Yes	20.00					
Literature												
Author			Title		Publishe	er	Year					
Paula Martin and Karen Tate	Getting	Started in P	roject Ma	nagement	John Wiley & Sons,	Inc.	2001					
2, Gerard M. Hill (ed)  The Complete Project Management Office Handbook						ons	2004					
y De	exercise defence  Author aula Martin and Karen Tate	Author aula Martin and Karen Tate Getting	exercise defence Yes Yes  Author aula Martin and Karen Tate Getting Started in F	exercise defence         Yes         20.00           Yes         30.00           Liter           Author         Title           aula Martin and Karen Tate         Getting Started in Project Martin	exercise defence  Yes  20.00 Written part of the exam  Yes  30.00 Oral part of the exam  Literature  Author  Title  aula Martin and Karen Tate Getting Started in Project Management	exercise defence  Yes  20.00 Written part of the exam - tasks and theory  Yes  30.00 Oral part of the exam  Literature  Author  Title  Publisher  aula Martin and Karen Tate  Getting Started in Project Management  John Wiley & Sons,	exercise defence Yes 20.00 Written part of the exam - tasks and theory Yes Yes 30.00 Oral part of the exam Yes  Literature  Author Title Publisher aula Martin and Karen Tate Getting Started in Project Management John Wiley & Sons, Inc.					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:		Design and development of industrial devices and measurement							
Course id:	EIPMS2		systems 2						
Number of ECTS:	6								
Teachers:		Milovanč	lilovančev S. Slobodan, Mitrović Lj. Zoran, Pejić V. Dragan						
Course status:		Elective	Elective						
Number of active tead	hing classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	)	2 0 1						
Precondition courses		None							

#### 1. Educational goal:

Acquiring knowledge in the field of Design and Development of Industrial Instruments and Measurement Systems.

2. Educational outcomes (acquired knowledge):

Students can design and develop industrial instruments and measurement systems.

#### 3. Course content/structure:

The design methodology, a comprehensive approach, procedures and methods, TOP-DOWN and BOTTOM-UP; the decomposition of complex systems, joining of system parts, hardware and software design, team work.

#### 4. Teaching methods:

Lectures, laboratory practice, consultations.

Knowledge evaluation (maximum 100 points)  Pre-examination obligations  Mandatory Points Final exam Mandatory Laboratory exercise defence Yes 30.00 Written part of the exam - tasks and theory Yes  Literature	Points 70.00
Laboratory exercise defence Yes 30.00 Written part of the exam - tasks and theory Yes	
	70.00
Literature	
Ord. Author Title Publisher	Year
1, Hank Zumbahlen   Linear circuit design handbook   Analog Devices	2008
2, Tim Williams The circuit designers companion EDN	2005
3, Paul Horowitz, Winfield Hill The Art of electronics Cambridge University Press	1989

# LAS STUDIO LA ST

#### UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:									
Course id:	EIVI		Virtual measurement systems						
Number of ECTS:	6								
Teachers:		Tomić J.	omić J. Josif, Sovilj M. Platon, Vujičić V. Vladimir						
Course status:		Elective	Elective						
Number of active tead	hing classe	es (weekly	)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	(	)	3 0 0						
Precondition courses			None						

#### 1. Educational goal:

Students acquire knowledge in the field of virtual measurement instruments and remote laboratories.

2. Educational outcomes (acquired knowledge):

The ability to design and apply virtual measurement instruments and virtual laboratories.

#### 3. Course content/structure:

Acquisition of huge amount of data, specific algorithms of data processing, technical data bases, archiving raw and processed data, measurement in high level electrical noise environment.

#### 4. Teaching methods:

Lectures. Laboratory practice.

	Knowledge evaluation (maximum 100 points)											
Pre-examination obligations Mandatory Points Fit					Final ex	cam	Mandatory	Points				
Project	Project Yes 50.00 Written part of the exam - tasks and theory						Yes	30.00				
Oral part of the exam Yes								20.00				
	Literature											
Ord.	Author		Title Pub				er	Year				
1,	Labview	Labview Measurements Manual Labview						2000				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:										
Course id:	EK451		Audio and Video Technologies							
Number of ECTS:	5									
Teachers:		Delić D. '	Delić D. Vlado, Trpovski V. Željen							
Course status:		Elective	Elective							
Number of active tead	ching classe	es (weekly	)							
Lectures:	Practical	Practical classes: Other teaching types: Study research work: Other class								
3	(	0	2 0 0							
Precondition courses		None								

#### 1. Educational goal:

Present new audio and video technology, and standards for recording, transmission and reproduction of audio and video signals. Describe the principles of operation of audio and video equipment and presentational system. Present audio and video technology in radio and television studios, as well as their transmission technique. Explain the formats of audio and video signals and tools for their digital processing in multimedia.

#### 2. Educational outcomes (acquired knowledge):

Students will learn about the nature of sound and image, what and how a person perceives and differentiates. Based on this, they will understand the concept of systems for digitizing, compressing, processing and transmission of audio and video signals. They will introduce the basic principles of operation and connections of microphones and speakers, audio and video mixers, cameras, monitors and projectors. They will understand the models of speech production and perception, and algorithms for coding and speech recognition based on those models. Students will learn the concept of temporal and spatial resolution, as well as the principles on which the analog and digital image transmission are based. They will also learn the basic modulation methods used in digital television.

#### 3. Course content/structure:

• The physical and physiological characteristics of sound and image (what people can hear and see, audible and visual range). • Standards for coding/compression and transmission of audio signals (Dolby, AAC, MPEG, HD and 3D sound). • Audio signal broadcasting (FM stereo, RDS) and digital audio transmission (GSM, VoIP, DAB - digital radio). • Formats for recording and transmission of audio and video information in multimedia environment (MIDI, JPEG, MPEG, HD and 3D). • Devices for recording and reproductions of sound and video (microphones, loudspeakers, and headphones; cameras, monitors, and projectors). • Audio and video mixers and other AV devices. Audio monitoring and sound editing, multi-channel recording (5.1, 7.1, 10.2,...)). • Audio systems for recording of voice and music program (selection and placement of microphones, sound for film and video). • Acoustical quality of both professional rooms and audio systems (studio, (home) cinema, concert halls). • Sound systems design for both indoor and outdoor rooms. Microphone and loud speaker systems for high quality reproduction. • Modelling of speech production and perception. Digital analysis and coding of speech signal (PCM, LPC, CELP). • Introduction to speech technologies: automatic speech recognition, speaker and emotion recognition, text to speech synthesis. • Principles of transmission of video signal. Analog system limitations. • Reasons for digitization of TV broadcasting. Properties and possibilities of digital systems. • TV compression procedures. Digital TV signal transmission.

#### 4. Teaching methods:

Lectures are conducted using Power Point presentations that are available to students in .pdf format. Presentations with specially created audio and video clips and animations demonstrate and illustrate key details in the lectures. The first part of the material (audio technology) is followed by exercises in the Laboratory of Acoustics and Speech Technologies at FTN. The second part of the course (video technology) is followed by exercises and visits to Radio and Television Vojvodina, where students will learn about the practical audio and video engineering, music and speech studies, and anechoic room. The students will write a midterm paper, whose defense is one of the exam prerequisites. Independent student work is supported through web portal of Chair of Telecommunications and Signal Processing - www.ktios.net.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points						
Presentation	Yes	10.00	Written part of the exam - tasks and theory	Yes	50.00						
Term paper	Yes	20.00	Coloquium exam	No	20.00						
Test	Yes	10.00									
Test	Yes	10.00									

	Literature										
Ord.	Author	Title	Publisher	Year							
1,	Miomir Mijić	"Audio sistemi"	Akademska misao, Beograd	2011							
2,	Željen Trpovski	Skripta sa predavanja	www.ktios.net	2012							
3,	Vlado Delić	Skripta sa predavanja	www.ktios.net	2012							

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Table 5.2 Course specification

Course:									
Course id:	EK453		SCADA Systems Design						
Number of ECTS:	5								
Teachers:		Milošević	Milošević S. Vladimir, Stefanović D. Čedomir						
Course status:		Elective							
Number of active tead	hing classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2		1 0 0							
Precondition courses		None							

#### 1. Educational goal:

Mastering the basics of SCADA systems as well as their design.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge, principles of design, use of programme simulations.

- 3. Course content/structure:
- 1. Basic principles of automatic control over technical systems
- 2. Levels of control of a technical system (local manual, remote manual, local automatic, remote automatic)
- 3. Elements of SCADA (Supervisory Control and Data Acquision) systems:
- •Centre for monitoring and control of the system (MCC Master Control Centre)
- •Remote Terminal Unit (RTU) PLC
- •Subsystem for communication between MCC and all RTUs in controlled objects
- 4. Communication subsystem and communication devices (physical lines, radio systems)
- 5. Communication protocols of SCADA systems:
- •Industry protocols (e.g.: Modbus, RP-570, Profibus, Conite), their common elements and particularities
- •Dependency of processing on the type and quality of the data.
- 6. Architecture of SCADA systems (monolithic, distributed, network-based)
- 7. Principles of the design of SCADA systems:
- •Human-machine interaction
- SCADA systems at long distances
- Internet based SCADA
- •Cryptographic security of SCADA communications

#### 4. Teaching methods:

Lectures are carried out using PowerPoint presentations available to students in PDF format. Multimedia presentations illustrate key details at the lectures. Individual work of the student is supported by the web portal of the Chair for Telecommunications and Signal Processing.

	Knowledge evaluation (maximum 100 points)											
	Pre-examination obligations	Mandatory	Points	Final ex	Final exam Mandatory Po							
Homework Yes 30.00 Written part of				Written part of the exam	- tasks and theory	Yes	50.00					
Test Yes 20.00												
	Literature											
Ord.	Author			Title		Publishe	er	Year				
1,	M. B. Dragović	Anten	e i prostiranje	radio tala	ısa	Elektrotehnički faku Beograd	Itet,	1996				
2,	T. S. Rappaport	Wirele	ss Communi	cations – I	Principles & Practice	Prentice Hall		1996				
3,	M. Stojić	Kontin	ualni sistemi	automats	kog upravljanja	Naučna knjiga, Beo	grad	1973				

# RESTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			Communication Systems Design							
Course id:	EK464									
Number of ECTS:	5									
Teachers:	Teachers: Petrović S. Vladimir, Šenk I. Vojin									
Course status:		Elective								
Number of active tead	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	1		1	0	0					
Precondition courses			None							

#### 1. Educational goal:

Mastering the methods of communication system design.

2. Educational outcomes (acquired knowledge):

Readiness to work in an engineering institution.

#### 3. Course content/structure:

Law and other conditions for acquiring an engineering license. Designing systems for coaxial cables. Designing the pair system. Designing optic communication systems.

#### 4. Teaching methods:

Lectures and Project.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Homework	Yes	5.00	Coloquium exam	Yes	30.00			
Lecture attendance	Yes	5.00						
Project defence	Yes	60.00						
		Liter	rature					

		Literature		
Ord.	Author	Title	Publisher	Year
1,	V. Milošević, V. Šenk	Projektovanje komunikacionih sistema	Skripta	2008

## FAC

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

**UNDERGRADUATE ACADEMIC STUDIES** 

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EM404A		Computer Electronics						
Number of ECTS:	5								
Teachers:		Bošković M. Dragan, Malbaša D. Veljko							
Course status:		Elective							
Number of active tea	Number of active teaching classes (weekly)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	)	2 0 0						

#### Precondition courses

#### 1. Educational goal:

To train students for modeling, design, verification, simulation, testing and implementation of complex digital circuits and systems in which hardware modules of high degree integration use components such as microprocessors, DSP, memories and dedicated hardware modules.

#### 2. Educational outcomes (acquired knowledge):

Students who successfully complete this course will be able:

- to design a model of a complex digital integrated circuit based on the given specification and with available hardware components of high degree integration,
- to apply contemporary software tools in design, verification, simulation, testing and implementation of complex digital integrated circuits which consist of hardware modules of high degree of integration,
- to assess performance and parameters of complex digital integrated circuit,
- to apply methods for design of complex digital circuits with low consumption.

#### 3. Course content/structure:

Models of complex digital integrated circuits where finished modules of high degree of integration are used. Specifications of complex digital systems. Procedure of modeling, design, verification, simulation, testing and implementation of complex digital circuits and systems where hardware modules of high degree of integration are sued as components. Software tools. Assessment and performance adjustment of complex digital systems. Assessment of parameters of complex digital systems. Complex digital systems with low consumption.

#### 4. Teaching methods:

Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations.

	Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final e	Final exam Ma				
Homew	Homework Yes 30.00			30.00	Theoretical part of the exam		Yes	40.00		
Laboratory exercise defence Yes 30.00										
	Literature									
Ord.	Author			Title		Publishe	r	Year		
1,	P. Rashinkar, P. Paterson, L. Singh	Syster	System-on-a-Chip, Verification Kluwer Academ					2002		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:								
Course id:	EM458		System Level Design					
Number of ECTS:	6							
Teachers: Dautović B. Staniša, Struharik J. Rastislav								
Course status:		Elective						
Number of active tead	ching classe	es (weekly	)					
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:			
3	(	3 0 0						

### Precondition courses

#### 1. Educational goal:

Acquiring knowledge about the system level design techniques of embedded systems. Learning how to use standard languages, techniques and methodologies, as well as tools for the successful design of embedded system at the system level.

- 2. Educational outcomes (acquired knowledge):
- ability to develop a system level model of the embedded system using some of the standard System Level languages
- ability to profile and optimize system level performance based on the design goals
- ability to verify developed embedded system at the system level

#### 3. Course content/structure:

Methodology of System-Level design. Models of computation used at system level: finite state machines (FSMs), dataflow, process networks. System-Level design languages: MATLAB, SystemC, SpecC. System-Level modeling: transaction-level modeling (TLM) for communication, processor and RTOS modeling. Specification, profiling and analysis of HW/SW systems. Codesign of hardware and software. System-Level design methodologies and tools for: partitioning, scheduling and communication synthesis. High Level synthesis. System-Level design of low power systems. Verification at the System-Level: verification based on simulation, verification based on formal methods, coverification of hardware and software.

#### 4. Teaching methods:

Lectures. Computer labs. Consultations.

Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations		Mandatory	Points	Final ex	kam	Mandatory	Points
Laborat	ory exercise defence		Yes	30.00	Written part of the exam	- tasks and theory	Yes	40.00
Test			Yes	10.00	Coloquium exam		Yes	20.00
Literature								
Ord.	Author			Title	;	Publisher		Year
1,	D. D. Gajski, S. Abdi, A. Gerstlauer, G. Schirner	Embed Verific	,	Design: N	Modeling, Synthesis,	Springer Verlag		2009
2,	M. Fujita, I. Ghosh, M. Prasad	Verific	ation Technic	ques for S	ystem Level Design	Morgan Kaufmann		2008
3,	B. Bailey, G. Martin, A. Piziali		ESL Design and Verification - A Prescription for Electronic System Level Methodology Morgan Kaufmann					2007



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Table 5.2 Course specification

Course:									
Course id:	EM459		Functional Verification of Hardware						
Number of ECTS:	6								
Teacher:	her: Struharik J. Rastislav								
Course status:		Elective							
Number of active tead	ching classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
3	(	)	3 0 0						

#### Precondition courses

#### 1. Educational goal:

Acquiring knowlegde of basic methods and tools in the field of functional verification of digital electronic systems. Introduction to the basic characteristics of the hardware verification languages.

- 2. Educational outcomes (acquired knowledge):
- ability to create functional veirification plan based on the functional specification of the system
- ability to develop a verification environment using some of the existing hardware verification languages (HVLs) ability to conduct funcional verification of complex digital system using developed verification environment

#### 3. Course content/structure:

Importance of verification. Functional verification. Functional verification flow. Verification plan. Verification environment. Basic components of the verification environment. Mesuring coverage of the verification plan. Code coverage. Functional coverage. Verification based on coverage measurement. Functional verification languages "e" and System Verilog. Industrial tools for the functional verification of hardware.

#### 4. Teaching methods:

Lectures. Computer labs. Consultations.

Knowledge evaluation (maximum 100 points)									
	Pre-examination obligations		Mandatory	Points	Final e	xam	Mandatory	Points	
Laborat	tory exercise defence		Yes	20.00	Written part of the exam	- tasks and theory	Yes	40.00	
Test						Yes	20.00		
Literature									
Ord.	Author			Title	;	Publisher		Year	
1,	A. Meyer	Princip	oles of Functi	onal Verifi	ication	Newnes		2003	
2,	A. Piziali	Functi Analys		ion Cover	age Measurement and	Springer Verlag		2004	
3,	S. Palnitkar	Design	n Verfication	with e		Prentice Hall		2003	
4,	C. Spear, G. Tumbush	SystemVerilog for Verification Springer Verlag						2012	

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



### Table 5.2 Course specification

Course:										
Course id:	EIJNZZ		Ionizing and Non-Ionizing Radiation and Protection							
Number of ECTS:	6									
Teacher:		Spasić-Jokić M. Vesna								
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	)	2	0	1					
Precondition courses			None							

#### 1. Educational goal:

Detailed introduction to the physical basics of functioning of various types of detectors and spectrometers of ionizing and non-ionizing radiation. Introduction to the principles of radiological safety, criteria in selection of detectors for radiation protection monitoring. Training in designing systems for human and equipment protection for ionizing and non-ionizing radiation.

#### 2. Educational outcomes (acquired knowledge):

Introduction to the basic detection mechanisms of ionizing and non-ionizing radiation. Training in proper use of measurement instruments. Introduction to the operation methods of measurement instruments and measurement methods. Introduction to the application scope and limitations. Training in the application of criteria in selection of radiation detectors and monitors. Introduction to the metrology fundamentals. Introduction to the physical and biological fundamentals of ionizing and non-ionizing radiation. Training in designing systems for human and equipment protection from ionizing and non-ionizing radiation.

#### 3. Course content/structure:

Fundamentals of radioactivity (ionizing radiation, physical parameters, measurement units); Interaction of ionizing and non-ionizing radiation with the matter; External and internal irradiation; Biological effects of ionizing radiation; Non-ionizing radiation – basic terms; Biological effect of non-ionizing radiation; Measurement of ionizing and non-ionizing radiation; Radiation protection (basic principles, dosage limits, organization, risk assessment, personal disometry); Legislation (Law on Protection of ionizing radiation, Law on protection of non-ionizing radiation, European directives); Metrological security; Incident and accident; Parameters in disometry of ionizing and nonionizing radiation. Detectors and spectrometers of ionizing radiation (gas, semiconductor, scintillation detectors, cloud, bubble and spark chambers, photographic emulsions, alpha, beta and gamma spectrometry, detection and spectroscopy of slow and fast neutrons). Detection of non-ionizing radiation, Biological effects of RF and microwave fields; Environmental monitoring; Individual monitoring; Principles of radiation safety.

#### 4. Teaching methods:

Lectures; Auditory Practice, Cinsultations.

	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points Final exam Mandato							Mandatory	Points	
Project	Project			30.00	Theoretical part of the ex	am	Yes	70.00	
	Literature								
Ord.	Author		Title Publisher					Year	
1,	G. F. Knoll	Radiat	ion Detection	and Mea	John Wiley & Sons, Inc.		1999		
2,	2, James Martin and Chul Lee Principles of Radiological Health and Safety John Wiley & Sons, Inc. 2002							2002	



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## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



#### Table 5.2 Course specification

Course:		Methods of measurement and measurement-acquisition systems								
Course id:										
Number of ECTS:	6		in biomediane							
Teachers:	Sovilj M. Platon, Milovančev S. Slobodan, Vujičić V. Vladimir									
Course status:										
Number of active tead	hing classe	es (weekly	<i>'</i> )							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	)	2	0	1					
Precondition courses			None							

#### 1. Educational goal:

Acquiring knowledge in the field of measurement methods and measurement-acquisition systems in biomedicine.

#### 2. Educational outcomes (acquired knowledge):

Understanding, working principles and structure of the biomedical measurement data acquisition system. Knowledge of the measurement methods in the biomedicine, ability to work in a multidisciplinary team environment with biomedical engineers and doctors on the problem solving related to biomedical measurement. Ability to perform an effective literature search and to utilize other types of information sources in the field of biomedical measurement. Knowledge and comprehension of the application of the Electrical and Computer Engineering in the field of the biomedical measurement.

#### 3. Course content/structure:

Structure and modules of the biomedical measurement-acquisition systems. Measured quantities in the biomedical measurement. Types and characteristics of the biomedical measurement-acquisition systems: measured quantities, Ranges of the measured quantities, Frequency ranges of the measured quantities and standard measurement methods. Transducers in biomedical measurement-acquisition systems. Signal conditioning in the biomedical measurement-acquisition systems. Digital signal conditioning in the biomedical measurement-acquisition systems. The role of computer and communication technology in biomedical measurement-acquisition systems. Software application for data acquisition. Introduction to measurement methods for different physical quantities in the measurement in the field of biomedicine. Analogue measuring instruments in biomedicine. Digital measuring instruments in biomedicine. Methods for measuring the electro-physiological signal. Measurement of the electric activity of nerve cells. Measurement of the electric activity of muscles. Measurement of the cardiac electrical activity. Methods for galvanic response measurement. Methods for displacement measurement in biomedicine. Methods for pressure and force measurement in biomedicine. Methods for cardiac rhythm measurements. Methods for blood pressure measurement. Lung capacity measurement and the speed of air during inhalation. Blood, tissue and organic liquids chemistry measurement. Methods for gas concentration measurement in medicine. Methods for measurement of partial pressure of gases in medicine. Spectrophotometric measurement of gas and liquid content in medicine. Methods for quantitative determination of particles in blood. Methods for body temperature measurement. Methods for artery and vein pressure measurement. Methods for blood flow measurement. Methods for blood volume displacement measurement. Blood pH and gastric acidity measurement. Respiratory rhythm measurement. Respiratory rate measurement.

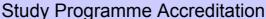
#### 4. Teaching methods:

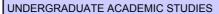
Lectures, Auditory practice, Laboratory practice, Consultations.

Knowledge evaluation (maximum 100 points)											
Pre-examination obligations		Mandatory	Points	Final exam		Mandatory	Points				
Laboratory exercise attendance		Yes	5.00	Written part of the exam - tasks and theory		Yes	30.00				
Laboratory exercise defence			Yes	30.00			•				
Lecture attendance			Yes	5.00							
Project			Yes	30.00							
Literature											
Ord.	Author		Title		)	Publisher		Year			

Ord.	Author	Title	Publisher	Year					
1,	D. B. Popović, M. B. Popović, M. Janković	Biomedicinska merenja i instrumentacija	Akademska Misao, Beograd	2010					
2,	D. Popović, M. Popović	Biomedicinska instrumentacija i merenja	Nauka, Beograd	1997					
3,	A. Lay-Ekuakille	Advances in Biomedical Sensing, Measurements, Instrumentation and Systems	Springer	2009					
4,	P. Sovilj	Stohastičko digitalno merenje EEG signala	Fakultet tehničkih nauka u Novom Sadu	2010					

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6





Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EK454	]	RF and microwave engineering 2						
Number of ECTS:	5								
Teacher:		Crnojevio	Crnojević-Bengin B. Vesna						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	′)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2		1 1 0 0							
Precondition courses None									

#### 1. Educational goal:

Students will gain advanced and applicable engineering knowledge in the field of RF and microwave engineering, which can be used in the engineering practice to design components, circuits and systems that operate above 1 GHz, such as Bluetooth, Wireless LAN and

### 2. Educational outcomes (acquired knowledge):

Advanced and applicable engineering knowledge in analysis and design of components, circuits and systems that operate at frequencies above 1 GHz. Capability to design components and to apply already existing components in the development of state-of the-art and nextgeneration wireless systems. The acquired knowledge will be used in the engineering practice as well as in further education, in courses Design of communication systems, Design of radio systems, Fundamentals of radio communications, and during master and PhD studies.

### 3. Course content/structure:

Overview of state-of-the-art wireless systems that operate above 1 GHz. Microwave passive circuits. Design of planar and waveguide resonators. Filter theory. Filter design using insertion loss method. Various types and configurations of filters. Antenna theory. Antenna design. Various types and configurations of antenna. Antenna systems. Microwave measurements. Other applications of microwaves (sensors, microwave heating, wireless energy transfer, electronic warfare, microwave weapons, biological effects and safety).

### 4. Teaching methods:

Lectures. Auditory excercizes. Computer excercizes

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final ex	kam	Mandatory	Points			
Complex exercises	Yes	20.00	Theoretical part of the exam		Yes	30.00			
Exercise attendance	Yes	5.00	Practical part of the exan	n - tasks	Yes	40.00			
Lecture attendance	Yes	5.00							
Literature									

Literature							
Ord. Author		Title	Publisher	Year			
1, D.M.Pozar		Microwave engineering	John Wiley & Sons	2010			
2, Vesna Crnojević-Bengin		RF i mikrotalasna tehnika		2011			
_	ord. 1, 2,	1, D.M.Pozar	1, D.M.Pozar Microwave engineering	1, D.M.Pozar Microwave engineering John Wiley & Sons			

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## STAS STUDIO

## UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:									
Course id:	EK461		Desi	gn of Radio Systems					
Number of ECTS:	5								
Teacher:		Milošević	Milošević S. Vladimir						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2		1	1 0 0						
Precondition courses			None						

### 1. Educational goal:

Mastering the techniques of radio link budget calculation: propagation modelling and prediction of EM field level.

2. Educational outcomes (acquired knowledge):

Theoretical knowledge, use of programme simulations.

#### 3. Course content/structure:

Fading and multipath propagation (LTV model of radio channels). Modelling of the influence of atmosphere, ground, vegetation... The concept of unavailability. Methods of prediction of EM field level. Budget calculation of fixed and mobile radio links. Radio relay links. Properties of particular types of radio systems.

### 4. Teaching methods:

Lectures, computer exercises, consultative sessions, homework.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory					Points				
Homework	No	10.00	Theoretical part of the exam	Yes	20.00				
Laboratory exercise defence	Yes	20.00							
Project defence	Yes	60.00							

		Literature		
Ord.	Author	Title	Publisher	Year
1,	M. B. Dragović	Antene i prostiranje radio talasa	Elektrotehnički fakultet, Beograd	1996
2,	W. C. Jakes	Microwave Mobile Communications	John Wiley & Sons, New York	1974
3,	A. F. Molish	Wideband Wireless Digital Communications	Prentice Hall, New Jersey	2001
4,	T.S. Rappaport	Wireless Communications – Principles & Practice	Prentice Hall, New Jersey	1996
5,	G. L. Stueber	Principles of Mobile Communication	Kluwer Academic Publishers, Boston	2000
6,	W.C.Y. Lee	Mobile communications engineering	McGrow-Hill, New York	1982
7,	W.C.Y. Lee	Mobile cellular telecommunications systems	McGrow-Hill, New York	1989



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EK465		Architectures of digital signal processors							
Number of ECTS:	5									
Teachers:		Kovačev	Kovačević V. Jelena, Teslić Đ. Nikola							
Course status:		Elective								
Number of active tead	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2		1	2 0 0							
Precondition courses			None							

#### 1. Educational goal:

Mastering the architecture design for digital signal processing, with an emphasis on the architecture processors for digital signal processing and their programming.

2. Educational outcomes (acquired knowledge):

Mastering the basic designing techniques and testing the architecture for digital signal processing (DSP). Acquired knowledge is the basis for further professional courses.

### 3. Course content/structure:

Introduction. Processor architecture for digital signal processing (Von Neuman and Harvard architecture, RISC and DSP, parallel processing, flow architecture, DSP resources: ALU, memory and feedback system, dedicated DSPs: DSP for audio signal processing, DSP for video signal processing). VLSI technology for DSP. Processor arithmetics for digital signal processing (data format, numerical presentation methods, basic operations ADD, MUL and MAC, specific operations: complex arithmetic, cordic, convolution and vector arithmetic). DSP programming (real time operation, programme languages: C and Assembler, tools: translator, simulator and debugger, testing).

#### 4. Teaching methods:

Lectures. Tutorials. Computer Practice. Consultations.

M. Popović, N. Teslić

·	Knowledge evaluation (maximum 100 points)										
Pre-examination obligations			Mandatory	Points	Final exam Mandatory		Points				
Homew	ork		Yes	5.00	Written part of the exam - tasks and theory Yes		40.00				
Homework			Yes	5.00			•				
Term paper			Yes	20.00							
Term pa	aper		Yes	20.00							
				Liter	ature						
Ord. Author Title			)	Publishe	er	Year					
1, V. Kovačević, M. Temerinac, Arhitekture i algoritmi DSP-a			1	FTN Novi Sad	·	2004					

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:			Telecommunication electronics					
Course id:	EM411A							
Number of ECTS:	6							
Teacher:		Videnović-Mišić S. Mirjana						
Course status:	Course status: Elective							
Number of active tea	ching classe	es (weekly	<b>'</b> )					
Lectures:	Practical	Classes: Other teaching types: Study research work: Other classes:						
3	2	2	1 0 0					

#### Precondition courses

#### 1. Educational goal:

To gain the basic knowledge in telecommunication electronics design. To get knowledge and ability to combine theory and simulation skills while designing telecommunication circuits. To become aware of the difference between the telecommunication electronics circuits realized as integrated circuit or as with discrete components.

#### 2. Educational outcomes (acquired knowledge):

-to gain knowledge about the basic telecommunication electronics circuits performance parameters and problems -to acquire ability to recognize the basic transceiver topologies - to gain knowledge about simulation of the basic RF circuits (matching circuits, selective amplifers,LNA, mixers, oscillators,...). - to gain knowledge about various technique that can be used to improve perdormance of some telecommunication circuits (LNA; narrow bandwidth amplifier, wide bandwidth amplifier, mixer, oscillator,...)

#### 3. Course content/structure:

The history of radio communication. Electromagnetic sprectrum and allocation. Basic issues in RF circuits. Modulation/demodulation. RF transmitter and receiver (basics). Intereference and filtering. Nonlinearity issues. Noise issues. Sensitivity and dynamic range. Impedance transformation. Passive RLC circuits (Q, BW, ...). Maximum power transfer. Matching circuits (L-match, pi-match, t-match, tapped capacitor resonator, tapped inductor resonator, double-tapped resonator). Transceiver Architectures. Receiver topologies (Regenerative receiver, Super-heterodyne, Dual super-heterodyne, Direct-conversion, Low-IF, Digital-IF, Impulse radio). Transmitter topologies (Direct conversion transmitter, Two-step transmitter, Direct modulation transmitter, Impulse radio transmitter). Passive devices and networks (Inductors, Transformers, Varactors, Signal Pads) Wiring (On-chip interconects, Off-chip wiring, Ground connections). BW estimation, HF broadband and NB amplifiers. Noise parameters, noise sources in MOSFET. Design of narrowband LNA (techniques and procedure). Design of broad-band LNA (techniques). Mixers (Image Aliasing, Feedthrough effects, Noise (SSB vs. DSB NF), Noise folding, Nonlinearity). Single vs. Double-Balanced Mixer Implementation. Gilbert Mixer (advantages, noise, linearity, improvements). Other mixer topologies (Square-Law Mixer, Passive Mixers). Oscillators (Colpitts, Hartley,...). Oscillator phase noise. System Integration Aspects (SoC, SiP, Substrate noise, Packages for RF, Pads for RF).

#### 4. Teaching methods:

Lectures; Exercises; EDA tools laboratory exercises; Consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory Points									
Computer exercise attendance	Yes	5.00	Theoretical part of the exam	Yes	30.00				
Lecture attendance	Yes	5.00	Practical part of the exam - tasks	Yes	40.00				
Project	Yes	20.00							

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	B. Razavi	RF Microelectronics	Prentice-Hall	1998						
2,	David M. Pozar	Microwave and RF Design of Wireless Systems	Wiley & Sons	2001						
3,	T. H. Lee	The Design of CMOS Radio-Frequency Integrated Circuits	Cambridge University Press	1998						



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EM420A	ľ	Modelling and simulation of RF and microwave circuits							
Number of ECTS:	6									
Teachers:	Crnojević-Bengin B. Vesna, Dautović B. Staniša, Novak O. Ladislav, Struharik J. Rastislav									
Course status: Elective										
Number of active teac	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
3	(	0 3 0 0								
Precondition courses			None							

#### 1. Educational goal:

Advanced knowledge from the field of RF and microwave electronics, with the special focus on the computer aided design (CAD) of microwave components and circuits.

#### 2. Educational outcomes (acquired knowledge):

Advanced and practical engineering knowledge on computer aided design (CAD) of microwave components and circuits. Using commercially available CAD software packages for the design of 2D and 2.5D circuits (Microwave Office / Sonnet) and 3D circuits (HFSS / CST). Practical engineering knowledge on passive microwave circuits (power dividers, antennas, ferromagnetic components), active microwave circuits (amplifiers, oscillators) and other applications of microwaves.

Acquired knowledge will be used in the engineering practice as well as in the further education for the MSc and the PhD degree.

#### 3. Course content/structure:

Power dividers and couplers. Antenna theory. Practical realizations of antennas and antenna types. Microstrip patch antenna. Active microwave circuits. Noise in microwave systems. Components for wireless systems. Detectors. Mixers. Oscillators. Power amplifiers. Theory and design of ferimagnetic components. Ferrite theory. Isolators. Phase shifters. Circulators. Edge-mode devices. YIG filters. Absorbing materials. Radar systems. Phased array antennas. Stealth technology. Attenuators. Microwave heating. Pother applications of microwaves.

Using commercially available CAD software packages for the design of 2D and 2.5D circuits (Microwave Office / Sonnet) and 3D circuits (HFSS / CST).

## 4. Teaching methods:

Lectures. Auditory excercizes. Computer excercizes.

				_ `			
Pre-examination obligations Mandatory Points			Final exam		Mandatory	Points	
ter excersise defence		Yes	20.00	Written part of the exam	- tasks and theory	Yes	40.00
ter exercise attendance		Yes	5.00	Theoretical part of the ex	cam	Yes	30.00
Lecture attendance			5.00			•	
			Liter	ature			
Author			Title	;	Publishe	er	Year
D. M. Pozar	Microv	vave Enginee	ering		John Willey & Sons		1998
JS. Hong, M.J. Lancaster	Micros	strip filters for	RF/Micro	wave Applications	John Willey & Sons	, Inc.	2001
Vesna Crnojevic-Bengin	RFim	nikrotalasna te	ehnika 2 -	skripta			2011
	ter excersise defence ter exercise attendance attendance  Author  D. M. Pozar  JS. Hong, M.J. Lancaster	ter excersise defence ter exercise attendance attendance  Author  D. M. Pozar  JS. Hong, M.J. Lancaster  Micros	ter excersise defence ter exercise attendance ter exercise attendance Tyes attendance Yes Author D. M. Pozar Microwave Enginee JS. Hong, M.J. Lancaster Microstrip filters for	ter excersise defence Yes 20.00 ter exercise attendance Yes 5.00 attendance Yes 5.00  Liter  Author Title  D. M. Pozar Microwave Engineering  JS. Hong, M.J. Lancaster Microstrip filters for RF/Micro	ter excersise defence Per exercise attendance Per exer	ter excersise defence Yes 20.00 Written part of the exam - tasks and theory Theoretical part of the exam - tasks and theory Theoretical part of the exam  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoretical part of the exam - tasks and theory  Theoreti	ter excersise defence Yes 20.00 Written part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theory Yes 20.00 Theoretical part of the exam - tasks and theoreti

Knowledge evaluation (maximum 100 points)

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



2007

International, Prentice Hall

## Table 5.2 Course specification

Course:										
Course id:	EM457			Nanoelectronics						
Number of ECTS:	5									
Teacher:		Stojanov	Stojanović M. Goran							
Course status:		Elective								
Number of active tea	ching classe	es (weekly	r)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	2	2	1	0	0					
Precondition courses			None							

#### 1. Educational goal:

Students will be introduced in the field of novel achievements and knowledge in nanoelectronics and application of nanostructural materials

- 2. Educational outcomes (acquired knowledge):
- understanding of changing materials properties with scaling dimensions from micro to nano
- examination of properties of carbon nanotubes
- characterization of nanodevices using different types of microscopy techniques and instruments
- an ability to understand numerous application fields of nanoelectronics and further development of this are in the near future

#### 3. Course content/structure:

George W. Hanson

Intriduction; Carbon nanotubes; Application of carbon nanotubes (CNTFET, displays from CNTs, memories, ets.); Nanostructures in drug delivery; Application of magnetic nanoparticles and metal nanoparticles in biomedicine; Nanomaterials for lithium-ion batteries; Nanocrystalline solar cells; Nanomembranes and ways of forming and testing their characteristics; Application of nanotechnology in consumer products; Nano-sensors; Forming and application of fluidic nanochannels; Nanotechnology and ethics.

### 4. Teaching methods:

Lecture; Auditory exercises; Laboratory exercises; Consultation.

	<u> </u>								
	Knowledge evaluation (maximum 100 points)								
	Pre-examination obligations Mandatory Points Final exam Mand							Points	
Laborat	tory exercise defence		Yes	30.00	Final exam - part one		Yes	35.00	
	Final exam - part two						Yes	35.00	
				Liter	ature				
Ord.	Author			Title	)	Publishe	er	Year	
1,	Goran Stojanović	С				FTN Izdavaštvo		2012	
2,	2, Waser, Rainer Nanoelectronics and Information Technology Weeinheim, WILEY-Verlag GmbH and Co					2005			
3	George W. Hanson	Funda	mentals of N	annelectro	onice	Pearson Educationa	al	2007	

**Fundamentals of Nanoelectronics** 

Strana 175 Datum: 18.12.2012

## ASSTUDIO DE LA COMPANIO DEL COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DE LA COMPANIO DEL COMPANIO DEL

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:									
Course id:	E233		I	nternet Networks					
Number of ECTS:	4								
Teachers:		Konjović	Konjović D. Zora, Marković Milan, Okanović Đ. Dušan						
Course status:		Elective							
Number of active teac	hing classe	es (weekly	')						
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:				
2	(	)	2 0 0						
Precondition courses			None						

#### 1. Educational goal:

Students learn about the theoretical bases and technologies of TCP/IP networks.

#### 2. Educational outcomes (acquired knowledge):

Understanding basic theory about TCP/IP networks. Gaining practical knowledge necessary for design, implementation and maintenance of local computer networks based on TCP/IP model.

#### 3. Course content/structure:

Network standards and standardization bodies.

Passive and active equipment for realization of computer network, structured cabling. TCP/IP networks: ISO reference model and TCP/IP, data transmission (basics of OSI 1 protocol) Ethernet and serial connections (basics of OSI 1 protocol), IPv4, ICMPv4, routing principles, dynamic routing protocols, UDP, TCP, DNS, IP new generation.

Communication devices: hub, switch, router. Network services (SMTP). Evolution of campus networks (VLAN, VPN). Monitoring, control, protection of network: SNMP, package filtering, cryptography, firewalls, controlled access, naming services, etherification protocols, digital signature. Wireless communication and mobile computing: evolution, standard compatibility, specific characteristics, wireless LAN and satellite based networks, mobile Internet protocol.

## 4. Teaching methods:

Teaching methods include: Lectures, laboratory practice, homework assignments, and consultations. During the lectures the content of the course is presented using the necessary didactic tools while student active participation is encouraged. The practical aspect of the course is covered at laboratory practice classes through assignments which students do independently or with the help of teaching assistants as well as through homework assignments (obligatory or optional). A student is expected to demonstrate the ability of independent task solving or understanding of the solution. The evaluation is in the form of oral conversation with the teaching assistant. The course lecturer and assistants have consultations with the students. During the consultations the students are given additional explanations of the material covered at the lecture and practice classes, and in the case of consultations relating to independent work on laboratory or homework tasks, the suggestions are given on h

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points				
Homework	Yes	5.00	Theoretical part of the exam	Yes	30.00				
Homework	Yes	5.00		-					
Laboratory exercise attendance	Yes	5.00							
Laboratory exercise defence	Yes	50.00							
Lecture attendance	Yes	5.00							

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	William Stallings	Data and Computer Communications	Prentice Hall, 2004, ISBN: 0- 13-100681-9	2004					
2,	Milan Kerac	Mrežno bazirani sistemi 1 - Priručnik za vežbe	FTN, 2004, (elektronsko izdanje)	2004					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:									
Course id:	EK422		Digital A	Audio Signal Processing					
Number of ECTS:	5								
Teachers:		Delić D. \	Delić D. Vlado, Sečujski S. Milan						
Course status:		Elective							
Number of active tea	ching classe	es (weekly	r)						
Lectures:	Practical	classes:	classes: Other teaching types: Study research work: Other classes:						
2		1	1 0 0						
Precondition courses			None						

#### 1. Educational goal:

The course objective is to deepen the knowledge of students about audio signals, especially about speech and music. In order to work with audio signal digital processing professionally, electrical engineers should have good understanding of spoken and music signal characteristics, as well as the knowledge of their processing and transmission possibilities.

### 2. Educational outcomes (acquired knowledge):

In the lectures students gain fundamental knowledge about both speech and music signals. Based on that, they are able to work on audio processing and analysis, as well as compression, coding and transmission of audio signals in a competent way. They will learn to make processing of music signals and apply audio effects. They also get basic knowledge necessary for working on speech technologies and audio forensics. They will be able to assess acoustic environment and measure the intelligibility of speech and music quality professionally. They gain practical experience with audio equipment, music instruments and software for digital audio signal processing.

#### 3. Course content/structure:

•Voice production, transmission, and perception. Modelling of speech production and perception. •Speech signal analysis in time and frequency domains. Digital analysis and coding of speech signal (PCM, LPC, CELP). •Coding and transmission of speech signal (G.711(64kbps), ADPCM(32), G.728(16), GSM(13), CELP(4), LPC(2.4)). •Speech quality evaluation and speech intelligibility measurements (objective measurements and subjective assessment of acoustical characteristics of voice). •Introduction to speech technologies: automatic speech recognition, speaker and emotion recognition, text-to-speech synthesis. •Introduction to audio forensics. Forensic speaker recognition. •Characteristics of music signals. Music instruments, placement of microphones for recording of orchestra. •Studio equipment and audio signal processing (multi-channel recording (5.1, 7.1, 10.2,...), audio-visual controls, mixing, level regulation, filters, regulation of dynamics and reverberation, echo, panorama, monitoring and sound editing, sound analysis and synthesis). •Acoustical quality of both professional rooms and systems for sound recording and reproduction (objective measurements and subjective assessments of sound area features, optimal conditions for sound recording and reproduction). •Audio systems for recording of voice and music program and audio effects (selection and placement of microphones, sound for film and video). •Formats for recording, transmission and storing of audio information in multimedia environment on a computer (MIDI, MPEG, HD and 3D sound). •Standards for coding/compression and transmission of audio signals (Dolby, AAC, MPEG). •Audio signal broadcasting (FM stereo, RDS) and digital audio transmission (GSM, VoIP, DAB - digital radio).

### 4. Teaching methods:

Lectures are conducted using Power Point presentations available to students in .pdf format. Presentations with specially created audio and video clips and animations demonstrate and illustrate key details in the lectures. The first part of the course (speech signals) is followed by auditory exercises in the Laboratory of acoustics and speech technologies at FTN. The second part of the course (music signals) is followed by exercises either in a sound studio at UNS or visits to either Studio Berar or Radio Novi Sad, where students will learn about practical audio engineering in music and speech studios, anechoic rooms and audio-theater complexes. The students will write a midterm paper, whose defense is one of the exam prerequisites. Independent student work is supported through the web portal of the Chair of Telecommunications and Signal Processing - www.ktios.net.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Presentation	Yes	10.00	Written part of the exam - tasks and theory	Yes	50.00			
Term paper	Yes	20.00	Coloquium exam	No	20.00			
Test	Yes	10.00						
Test	Yes	10.00						

		Literature		
Ord.	Author	Title	Publisher	Year
1	, Slobodan Jovičić	"Govorna komunikacija - fiziologija, psihoakustika i percepcija"	Nauka, Beograd	1999
2	, B. Gold and N. Morgan	Speech and Audio Signal Proc Proc. and Perception of Speech and Music	JW&S	2000
3	, Vlado Delić i dr.	Skripta sa predavanja	www.ktios.net	2012

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:							
Course id:	EM430A		Control	and process electronics			
Number of ECTS:	6						
Teachers:		Slankamenac P. Miloš, Živanov B. Miloš					
Course status:		Elective					
Number of active tead	ching classe	es (weekly	)				
Lectures:	Practical	classes: Other teaching types: Study research work: Other classes:					
3	(	)	3	0	0		

#### Precondition courses

#### 1. Educational goal:

To train students to design and apply electronic systems and devices for industrial process control.

#### 2. Educational outcomes (acquired knowledge):

The student who successfully completes this course will be able: - to design and apply electronic circuits for sensor signal processing in industrial processes. - to design and apply electronic circuits for excitation of executive organs applied in industrial process control. - to design and apply microprocessor systems for industrial process control. - to design and apply analog and digital control algorithms. - to design and apply industrial process control systems based on the programmable logic controllers (PLC).

#### 3. Course content/structure:

Electronic circuits for sensor signal processing. Analog-digital and digita-analog adaptive degrees. Electronic circuits for excitation of executive organs. System overview with or without feedback. Modelling of electronic control systems applying Simulink. Implementation of analog and digital control laws. Industrial communication protocols. Architecture of the programmable logic controllers (PLC). Programming and application of programmable logic controllers.

#### 4. Teaching methods:

Theoretical basis are presented to students by the course professor during the lectures. In the lectures, students can organize short presentations about given topics. In the laboratory practice, teacher's assistant will organizes practical lectures. Students are obliged to prepare for each laboratory practice and bring written report if required for the given practice. Remaining time in the laboratory practice is planed for the practical practice of lectured topics for the given laboratory practice, and can be used for student knowledge testing if needed.

	Knowledge evaluation (maximum 100 points)							
Pre-examination obligations			Mandatory	Points	Final e	Final exam Mandatory		Points
Laboratory exercise attendance Yes 5.00			Written part of the exam	- tasks and theory	Yes	50.00		
Laborat	ory exercise defence		Yes	40.00				
Lecture attendance Yes 5.00								
				Liter	ature			
Ord.	Author			Title	•	Publishe	er	Year
1,	Milić Stojić	Kontinualni sistemi automatski			kog upravljanja	Naučna knjiga, Beo	grad	1990
2,	2, Milić Stojić Digitalni sistemi upravljanja			ravljanja				1994
2, Milić Stojić Digitalni sistemi upravljanja							1994	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



## Table 5.2 Course specification

Course:							
Course id:	EM436A			Mechatronics			
Number of ECTS:	6						
Teachers:		Borovac A. Branislav, Nađ F. Laslo					
Course status:		Elective					
Number of active tea	ching classe	es (weekly	)				
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:		
3	2	2	1	0	0		

#### Precondition courses

#### 1. Educational goal:

The course is designed for the students of electronics. The course objective is to train students to creatively design processes of mechatronic systems. Students learn to identify the problem, design, develop and select the best strategy and concept using fundamental principles, corresponding analysis and experiments, if needed. Students then create modules for the best concept and integrate them in the system.

- 2. Educational outcomes (acquired knowledge):
- student ability to personally go through the designing process of mechatronic systems through designing a specific device.
- student ability to participate in defining and solving problems related to mechatronic system design in cooperation with engineers from related professions
- student ability to make a selection of critical components in mechatronic systems
- student ability to make a selection of suitable controller type
- Special efforts are made in order for students to understand that in complex mechatronic systems, each aspect is equally important and that all modules of the system (mechanical part, electronics, programming,...) should operate adequately and reliably in order to preserve the system functionality as a whole.

#### 3. Course content/structure:

During the course students learn: basic mechanical constructions and processes of mechatronic device design, to critically analyze existing solutions of mechatronic devices, and to learn to use electromechanical analogies in the mechatronic device analysis and design. The basic principles of mechanical components are taught in the course, partially in the classroom and partially in the laboratory. Besides, basic electromechanical analogies are taught and applied in the analysis and synthesis of certain subassembly solutions in the mechatronic devices. Afterwards, existing solutions are critically analyzed with a special emphasis on weaknesses and improvement possibilities, selection of better mechanical solution, adequate sensor or actuator, better methods of control or all together.

#### 4. Teaching methods:

Lectures; Auditory Practice; Laboratory Practices; Consultations. Students can choose two ways to pass the examination: - by making a prototype included in a complex project and – without making a prototype but with making a study for the proposed device solution in a simpler project. Students who make the device should, make the prototype and defend it (up to 50 points). They are free from first part of written exam (the second part is worth up to 30 points.) Students who don't want to make the prototype, have to do the study and defend it (up to 30 points). They have to pass both part of written exam (20+30 points). On the oral exam (up to 20 points) will be formed the final grade. Students who pass a colloquium during the semester (up to 20 points) are free from the first part of the written exam, too.

Knowledge evaluation (maximum 100 points)

Milowiedge evaluation (maximum 100 points)								
	Pre-examination obligations	Mandatory	Points	Final ex	Final exam			
Project			Yes	30.00	Final exam - part one		Yes	20.00
Project	task		No	50.00	Final exam - part two		Yes	30.00
Term pa	aper		No	20.00	Coloquium exam		No	20.00
		,			Oral part of the exam		Yes	20.00
Literature								
Ord.	Author		Title			Publisher		Year
1,	V. Miltenović	Mašins	ski elementi-	oblici, pro	račun, primena	Mašinski fakultet u Nišu, ISBN 86-80587-12-5		2001
2,	M. Živanov	Elektro	onika, kompo	nente i po	njačavačka kola	Novi Sad (odgovarajuća poglavlja)		2000
3,	D. Shetty, R. Kolk	Mecha	Mechatronics System Design			PWS Publishing Company, ISBN 0-534-95285-2		1997
			standing Election to mec		chanical Engineering – An IEEE press, ISBN 0-78 1031-4			1995

## NO DE STUDIO

#### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:			_, ,								
Course id:	EM455		Electronic multimedia systems								
Number of ECTS:	5										
Teacher: Slankamenac P. Miloš											
Course status:		Elective									
Number of active tead	ching classe	es (weekly	)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
2	C	)	3	0	0						

#### Precondition courses

## 1. Educational goal:

Acquiring knowledge in the field of electronic and optoelectronic components and systems used in modern multimedia technologies. Acquiring knowledge in the field of practical skills for programming electronic and optoelectronic systems for the classic and touch-screen displays to show text, graphics and animation, with or without sound effects. The aim is to introduce students to the existing hardware and the development of multimedia systems learn to program additional it in order to obtain the corresponding multimedia content.

- 2. Educational outcomes (acquired knowledge):
- The ability of practical use of digital electronic circuits and displays in multimedia systems.
- The ability of programming relatively simple systems with a classic and touch-screen displays to show text, graphics and animation, with or without sound effects.

#### 3. Course content/structure:

Electronic and optoelectronic components and systems in modern multimedia technologies. The classic and touch-screen displays for text processing. The classic and touch-screen displays for showing images and animations with and without sound effects. Development multimedia systems and their capabilities. Software tools and programming method development of multimedia systems.

## 4. Teaching methods:

Lectures, numerical (N) and laboratory (L) practice, consultations.

Knowledge evaluation (maximum 100 points)									
Pre-examination obligations Mandatory Points Final exam Mandatory									
Laboratory exercise attendance	Yes	5.00	Written part of the exam - tasks and theory	Yes	30.00				
Laboratory exercise defence	Yes	60.00							
Lecture attendance	Yes	5.00							
		Liter	rature						

	Literature								
Ord.	Author	Title	Publisher	Year					
1,	Shi Yun Q.	Image and video compression for multimedia engineering: fundamentals, algorithms, and standards	2nd edition, CRC Press	2008					

## STAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:												
Course id:	Dedicated Computer Structure Design for Signal Processing											
Number of ECTS:	5	7										
Teacher: Pap I. Ištvan												
Course status:		Elective										
Number of active tead	hing classe	es (weekly	)									
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:							
3		1	2	2 0 0								
Precondition courses			None									

### 1. Educational goal:

Students will learn about the basics of designing dedicated computer structure using VHDL.

### 2. Educational outcomes (acquired knowledge):

Students know the basic standards and technologies required for designing dedicated computer structures and are able to use VHDL language of multiprocessor computer structures.

#### 3. Course content/structure:

Design of multiprocessor computer structures using VHDL. Design in the field of intercomputer communications and networks. Design in the field of ISDN, ATM, SDH. Design based on digital signal processors. Examples and practical work in the laboratory.

### 4. Teaching methods:

Lectures, Tutorials, Computer practice, Consultations

During the term students attend lectures and computer practice classes. During the term students work on their examination paper at the computer practice classes.

computer produce diacocci.									
	Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points					Final ex	kam	Mandatory	Points	
Homework Yes 30.0				30.00	Coloquium exam		No	40.00	
	Theoretical part of the exam							30.00	
					Practical part of the exam	n - tasks	Yes	40.00	
				Liter	ature				
Ord.	Author		Title			Publishe	er	Year	
1,	B. Atlagić	Projektovanje namenskih računarskih struktura, skripta						2007	

## TAS STUDIO

### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:											
Course id:	E23B1	Computer Network Fundamentals 2									
Number of ECTS:	4										
Teachers: Samardžija M. Dragan, Bašičević V. Ilija											
Course status:		Elective									
Number of active teac	hing classe	es (weekly	r)								
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:						
2 (		)	2	0	0						
Precondition courses			None								

### 1. Educational goal:

Students gain fundamental knowledge about computer networks and are able to design and realize simple communication programs.

2. Educational outcomes (acquired knowledge):

Knowledge about basic notions, standards and technologies in the field of computer networks, and the ability design and realize simple communication programs.

#### 3. Course content/structure:

Standards in intercomputer communications. Designing a topology of computer networks. Flow control in computer networks. Network direction and identification. Intercomputer communication devices. Network operating systems (administration, supervision and operational management) Internet (architecture and services).

## 4. Teaching methods:

Lectures: Tutorials. Computer practice. Consultations.

Students work during the semester at computer practice classes on developing their examination paper.

, , ,								
Knowledge evaluation (maximum 100 points)								
Pre-examination obligations Mandatory Points				Final ex	Mandatory	Points		
Project task Yes 30.00				30.00	Coloquium exam		No	40.00
	Theoretical part of the exam							30.00
	Practical part of the exam - tasks							40.00
				Liter	ature			
Ord.	Author			Title	;	Publishe	er	Year
1,	V. Kovačević, M. Popović i Ž. Jurca	Osnovi računarskih mreža, skripta FTN				FTN		2007



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Table 5.2 Course specification

Course:										
Course id:	EK452	Monitoring and Noise Protection								
Number of ECTS:	5									
Teacher:	Delić D. Vlado									
Course status:		Elective								
Number of active tead	hing classe	es (weekly	)							
Lectures:	Practical	classes:	Other teaching types:	Study research work:	Other classes:					
2	1	1	1 0		0					
Precondition courses			None							

#### 1. Educational goal:

Noise is becoming an increasing problem in the living and working environment, and more attention is paid to monitoring and protecting against noise. To describe the characteristics of noise and how noise affects people. To explain how to measure noise in both working and living environments. To present measurement devices and tools for noise analysis. To study the standards and regulations on permitted noise level and introduce techniques of measurement, monitoring, and noise protection in both working and living environments.

#### 2. Educational outcomes (acquired knowledge):

Students will acquire basic knowledge about noise and its characteristics and impact on people. They will learn about the standards and regulations on permissible noise levels in both working and living environments. At exercises they gain practical experience with measurement devices and techniques of measurement, monitoring and noise protection. Students will learn to measure noise, room acoustic parameters, and insulation power of barriers. They will be able to identify and qualify potential problems with noise and suggest solutions for the control and noise protection both indoors and outdoors.

#### 3. Course content/structure:

• Audible range and limit of the risk of damage to hearing (ear sensitivity, phone and dB(A)). • Basic characteristics of the noise and its impact on humans (level, spectrum and temporal character). • The noise from multiple sources (equivalent and authoritative level, overall, specific and background noise). • The regulations on permissible noise level in the working and living environments, regulations and standards (dB(A) and the normative line of acceptable noise (N-curves) in some areas, the impact of noise on certain activities, permitted noise dose during working hours). • Measuring chain and equipment for measurement and analysis of noise (sound level meters, filters, dosimeters, software tools). • Environmental noise (traffic, construction and communal noise; sources and routes of noise transmission; methods of measuring and noise protection). • Noise in the workplace (acoustic power, methods of measuring noise in the working environment, control measures and the protection of workers). • Monitoring of noise (noise maps in the environment, planning architectural acoustics). • Noise control (prevention at source (technical and legal means), control of the transmission lines, protection of the receipt). • Building acoustics (principles of building vs. principles of acoustics; insulation material power, roads of penetrating noise, structural noise). • Sound insulation (materials and structures, measurement of sound insulation of wall, floor and ceiling, measuring the sound insulation of windows and doors, evaluation of sound insulation in accordance with the regulations and standards, methods to improve the sound insulation). • Methods of prevention and protection from noise (acoustic barriers, sound absorbers, acoustic treatment of rooms and noise insulation, personal protection, active noise canceling).

#### 4. Teaching methods:

Lectures are conducted using Power Point presentations that are available to students in .pdf format. Presentations with specially created audio and video clips and animations demonstrate and illustrate key details in the lectures. The first part of the course is followed by auditory exercises. The second part of the course is followed by exercises in the Laboratory of Acoustics and Speech Technologies at FTN. Visits to several companies and institutions in Novi Sad are arranged, where students will learn about the measurement devices and software for noise analysis, as well as the techniques of measurement, monitoring and noise protection. The students will write a midterm paper, whose defense is one of the exam prerequisites. Independent student work is supported through the web portal of the Chair of Telecommunications and Signal Processing - www.ktios.net.

Knowledge evaluation (maximum 100 points)								
Pre-examination obligations	Mandatory	Points	Final exam	Mandatory	Points			
Presentation	Yes	10.00	Written part of the exam - tasks and theory	Yes	50.00			
Term paper	Yes	20.00	Coloquium exam	No	20.00			
Test	Yes	10.00						
Test	Yes	10.00						

	Literature									
Ord.	Author	Title	Publisher	Year						
1,	Momir Praščević, Dragan Cvetković	"Buka u životnoj sredini"	Fakultet zaštite na radu, Niš	2005						
2,	Petar Pravica, Dragan Drinčić	"Elektroakustika"	VISER Beograd	2006						
3,	Vlado Delić	Skripta sa predavanja	www.ktios.net	2012						



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 06. Programme Quality, Contemporaneity and International Compliance

The study programme Power, Electronic and Telecommunication Engineering is coordinated with contemporary trends and situation in profession in the field of electrical and computer engineering and is compatible with similar programmes in international higher education institutions. Thus the good harmony is achieved between the best educational practices in this field in our country and positive examples of study programmes of prominent European and world wide faculties in the field of electrical and computer engineering.

This study programme is designed to be complete and comprehensive and provides students with the latest scientific and professional knowledge in this field.

The study programme Power, Electronic and Telecommunication Engineering is similar and comparable and coordinated with the accredited study programmes of the following institutions:

- 1. National Technical University of Athens, School of Electrical and Computer Engineering, Greece (http://http://www.ece.ntua.gr/index.php?option=com_courses)
- 2. Faculty of Electrical Enginering and Information Technology, University of Hannover, Germany (http://www.et-inf.uni-hannover.de/etech-it.html?&L=1)
- 3. Faculty of Electrical Enginering, Graz University of Technology, Austria (http://portal.tugraz.at/portal/page/portal/TU Graz/Studium Lehre/Studien/ET Bachelor)



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Standard 07. Student Enrollment

Faculty of Technical Sciences, in accordance with social demands and its material, human and technical-technological resources, enrolls certain number budget- and self-financed students (usually 150 budget-financed students and up to 50 self-financed students) to the undergraduate academic studies in the study programme Power, Electronic and Telecommunication Engineering. This number is redefined each year by special decision of the founder. The selection of students and enrollment of the applied candidates is based on the previous success in education and achieved results at the entrance exam, as defined in the Regulations of student enrolment on study programmes.

Students from other corresponding study programmes, as well as persons with completed studies, can also enroll to this study programme. Special board (which consists of the chiefs of the departments involved in the realization of the study programme) evaluates all activities of the candidates for enrollment, and determines the year of study in which candidate is to be enrolled based on the recognized number of credits.



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



Standard 08. Student Evaluation and Progress

The final grade of the student in each course within this study programme is determined by continual monitoring of student work, achieved results and involvement of students during the school year, and by final examination results.

The students master the study programme by taking examinations and thus obtaining a certain number of ECTS credits, in accordance with the study programme. Each course at the study programme has a set number of ECTS credits which students obtain on successfully passing the examination. The number of ECTS credits is determined based on the student work load in mastering certain course and by application of unique methodology of the Faculty of Technical Sciences for all study programmes. Students' success in mastering a certain course is constantly monitored during classes and is presented in points. Maximum number of points obtained in a course is 100.

Students obtain points from a course through their work during classes, fulfillment of their prerequisites and taking the examination. The maximum number of points which students can obtain by fulfillment of exam prerequisites during the classes ranges from 30 to 70, depending on the course.

Student's final achievement at a course is presented using grades from 5 (fail) to 10 (excellent). Student's grade is based on the overall number of points obtained on fulfilling prerequisites and taking the examination, and in accordance with the quality of acquired knowledge and skills.

The prerequisites are: lecture attendance, auditory, laboratory and/or computer practice, term papers, homework assignments, smaller professional projects, tests, etc. Additional conditions for taking the exam are separately defined for each course.

Advancement of students during education is defined by Regulations of studying at undergraduate academic studies.



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Standard 09. Teaching Staff

For the realization of the study programme Power, Electronic and Telecommunication Engineering, there is the highly qualified faculty staff with necessary scientific, artistic and professional qualifications and competencies, and also with experience in educational work.

Total number of lecturers and associates employed at the study programme is adequate to accomplish the total number of classes. About 85% of the total lecturers and associates are permanently employed full-time.

The quality and number of staff fully complies with the requirements of this study programme. Total number of staff on the study programme is sufficient to cover total number of practice in the programme, thus accomplishing around 300 hours of active lecturing annually.

The lecturing group size is up to 180 students, the practice group is up to 60 students and laboratory practice group is up to 20 students.

All information on lecturers and associates (CVs, appointed titles, references) are available to the public on the website of the Department of Power, Electronic and Telecommunication Engineering (http://deet.ftn.uns.ac.rs), as well as within the tables for scientific, artistic and professional qualifications on the website of the Provincial Secretariat for Science and Technological Development

(http://apv-nauka.ns.ac.yu/vece/indexd.jsp?zd_dokumentId=80&Oblast=13).

Special attention within the study programme is given to the professional development, promotion and development of teaching staff through participation in national and international symposia and seminars in order to enhance their knowledge and apply best practices in class.

## ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Adžić Z. Nevenka				
Academic title:					Full Professor				
					Faculty of Technical Sciences - Novi Sad				
					15.09.1978				
	ntific or art f				Mathematics				
	emic carie		Year	Institution			Field		
	emic title e	lection:	2002	Faculty of Technical Sci		ad	Mathematics		
	thesis		1990	Faculty of Sciences - No			Mathematical Sciences		
	ster thesis		1986	Faculty of Sciences - No			Mathematical Sciences		
	elor's thesis		1976	Faculty of Sciences - No			Mathematical Sciences		
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es I			
	ID	Course	e name			Study pro	gramme name, study type		
1.	E121	Mathe	matical Ana	alysis 2			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	E221A	Mathe	matical Ana	alvsis 2		Academic			
		- Watero	Tradioar 7 tric			,	asurement and Control Engineering, uate Academic Studies		
3.	GG10	Mathe	matical Met	thods 3			l Engineering, Undergraduate Academic Studies		
						( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies			
4.	M106	Mathematics 2				( M30) Energy and Process Engineering, Undergraduate Academic Studies			
7.		Matric	mation 2				hnical Mechanics and Technical Design, uate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic		
5.	S017	Mathe	matics 2			( S00) Traf Academic	fic and Transport Engineering, Undergraduate Studies		
	0017	- Water				( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
6.	S0213	Mathe	Mathematical Statistics				( S00) Traffic and Transport Engineering, Undergraduate Academic Studies		
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
							ety at Work, Undergraduate Academic Studies		
						( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies		
7.	Z104	Mathe	matics 1			( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies			
						(Z20) Envii Studies	ronmental Engineering, Undergraduate Academic		
8.	BMI91	Mathe	matics 1			( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
9.	BMI92	Mathe	matics 2			( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
10.	E101A	Discre	te Mathema	atics			ver, Electronic and Telecommunication g, Undergraduate Academic Studies		
						( I10) Indus Studies	strial Engineering, Undergraduate Academic		
11.	IM1012	Probal	oility and St	atistics	( I20) Engineering Management, Undergraduate Academ Studies				
						( P00) Prod Studies	duction Engineering, Undergraduate Academic		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



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c Studies							
Academic Studies							
journal of computer							
he Australian							
mathematical society, Vol.45, (1992) 267-276.<\eng>  N. Adzic: Spectral approximation for single turing point problem, ZAMM72(1992)6, T621-T624.							
871.							
⁻ 871. 53-T555.							
53-T555.							
53-T555. blems, ZAMM78							

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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES Power, El

Power, Electronic and Telecommunication
Engineering



Summary data for teacher's scientific or art and professional activity:							
Quotation total :	5						
Total of SCI(SSCI) list papers :	10						
Current projects :	Domestic :	2	International :	0			



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

	Name and last name:					Atlagić S. Branislav			
Acad	demic title:				Associate Professor				
-		itution v	vhere the te	acher works full time and					
	ing date:				07.01.1985				
	ntific or art f				Computer En	gineering ar	nd Computer Communication		
Acad	demic caries	er	Year	Institution			Field		
Acad	demic title el	ection:	2011				Computer Engineering and Computer Communication		
PhD	thesis		2001	Faculty of Technical Science	ences - Novi S	ad	Electrical and Computer Engineering		
Mag	ister thesis		1996	Faculty of Technical Science	ences - Novi Sa	ad	Electrical and Computer Engineering		
Bach	nelor's thesis	3	1984	Faculty of Technical Science	ences - Novi S	ad	Electrical and Computer Engineering		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	gramme name, study type		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
1.	E230	Logic I	Design of C	omputer Systems 2		( ES0) Pow Academic	ver Software Engineering, Undergraduate Studies		
		_59101	_ 55.911 01 0	pato. 5 jotomo 2		Undergrad	asurement and Control Engineering, uate Academic Studies		
							er, Electronic and Telecommunication g, Undergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
2.	RT49	Real Time Software 1					asurement and Control Engineering, uate Academic Studies		
۷.	K149					( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
							( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
3.	RT49A	Pool T	ïme Softwa	ro 2		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
J.	K149A	ixeai i	iiile Soitwa	16.2			tware Engineering and Information Technologies, uate Academic Studies		
4.	ESI006	Introdu	uction to crit	ical mission software for p	oower grids	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
5.	ESI009	Smart	Grid Comm	nunication Protocols		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
6.	ESI019	Critica	l mission so	oftware for power grids		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
						( E20) Con Academic	nputing and Control Engineering, Master Studies		
7.	RT58	Dedica	ated Compu	iter Structure Design 2		' '	tware Engineering and Information Technologies, ademic Studies		
							er, Electronic and Telecommunication g, Master Academic Studies		
8.	ESI025	Simula	ntion of Pow	ver Greed critical mission s	systems	( ES0) Pov Studies	ver Software Engineering, Master Academic		
9.	ESI033	Advan	ced Power	Grid Communication Prote	ocols	( ES0) Pov Studies	ver Software Engineering, Master Academic		
10.	DRNI02	Select	ed Topics ir	n Advanced Software Arch	nitecture	( E20) Con Academic	nputing and Control Engineering, Doctoral Studies		
Re	presentative	reffere	nces (minim	num 5, not more than 10)					
1.	Udžbenik	"Logičk	ko projektov	ranje računarskih sistema	II", V.Kovačev	rić, B.Atlagić	s, FTN 2007/2009.		
2.	M.Popovi Journal o	c, B.Atla	agic, V.Kova are Mainten	acevic, "Case study: a ma ance and Evolution, John	intenance prac Wiley and Son	tice used w	ith real-time telecommunications software", h-April issue, 2001.		
3.	D.Kukolj,	M.Berk	o-Pušić, B.		sign of Supervi	sory Control	Functions Based on Multylayer Perceptron",		

## TE STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



	Description ofference (wining up 5 and many thought)									
Representative refferences (minimum 5, not more than 10)										
4.	D.Kukolj, B.Atlagic, M.Petrov, "Data clustering using a re-organizing neural network", Taylor & Francis Inc., Cybernetics and Systems, An Int. Journal, Vol. 37, No. 7, 2006, pp. 779-790.									
5.	Generalizovani akviziciono upravljački sistem -	GAUS								
6.	B.Atlagic, M.Sagi, D.Milinkov, S.Culaja, B.Bogovac, "A way towards efficiency of SCADA infrastructure", ECBS 2012, Novi Sad 2012.									
7.	B.Atlagic, D.Milinkov, M.Sagi, B.Bogovac, "High-Performance Networked SCADA Architecture For Safety-Critical Systems", ECBS-EERC 2011, Bratislava.									
8.	B.Atlagic, V.Mihić, T.Maruna, "A Methodology for Specification and Development of Control Code in Industrial DCS Application", XIV International Conference on Systems Science, Wroclav 2001.									
9.	B.Atlagic, M.Sagi, D.Milinkov, B.Bogovac, S.Cu IEEE Workshop on Model-Based Development				ations" , The 9th					
10.	B.Atlagic, D.Kukolj, V.Kovacevic, M.Popovic, "Application development environment of an integrated SCADA system", EUROCON 2003, Ljubljana 2003.									
Sui	mmary data for teacher's scientific or art and profe	essional activity:								
Quotation total: 0										
Tota	l of SCI(SSCI) list papers :	3								
Curr	ent projects :	Domestic :	2	International:	1					



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Bajić D. Dragana				
Acad	lemic title:				Full Professor				
1		itution v	vhere the te	acher works full time and					
starti	ng date:				22.09.2000				
Scie	ntific or art f	ield:			Telecommuni	cations and	Signal Processing		
Acad	lemic caries	er	Year	Institution			Field		
Acad	lemic title el	ection:	2006	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing		
PhD	thesis		1995	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing		
Magi	ster thesis		1989	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing		
Bach	elor's thesis	3	1984	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing		
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	s			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	EK313	Comp	uter Commi	unication		Undergrad (E10) Pow	tal Traffic and Telecommunications, luate Academic Studies er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	BMI105		ical basics, dical signals	processing and modelling	of		medical Engineering, Undergraduate Academic		
3.	BMI123			lical signal analysis		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
4.	EK202	Comm	unication n	etworks - introduction		Undergrad (E10) Pow	asurement and Control Engineering, luate Academic Studies er, Electronic and Telecommunication lig, Undergraduate Academic Studies		
5.	EK458	Teleco	mmunicatio	on networks		(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
6.	EK460	Biomedical signal processing				(E10) Pow	er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
7.	ETI21	Comm	unication P	rotocols			ctronics and Telecommunications, Undergraduate		
8.	DE110S	Stocha	astic Proces	ses in Telecommunication	ns		ver, Electronic and Telecommunication g, Specialised Academic Studies		
9.	DE411S	Signal	processing	in medical research		( E11) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
10.	EK530	Nonlin	ear Biomed	lical Signal Processing		Studies (E10) Pow	er, Electronic and Telecommunication  g, Master Academic  Studies		
11.	EK531	Multius	ser Detection	on	_	(E10) Pow	er, Electronic and Telecommunication g, Master Academic Studies		
12.	SI029	Biome	dical signal	processing		( E00) Pow	ver, Electronic and Telecommunication g, Specialised Professional Studies		
13.	BMIM2B	Biome	dical statist	ics			medical Engineering, Master Academic Studies		
14.	BMIM2C			ysis and complexity of phy	ysiological		medical Engineering, Master Academic Studies		
15.	BMIM2D	Inform		v in biosystems		( BM0) Bio	medical Engineering, Master Academic Studies		
16.	EK550		h Technolo			(E10) Pow	er, Electronic and Telecommunication ng, Master Academic Studies		
17.	DE110	Stochastic Processes in Telecommunication			ns	(E10) Pow Engineerin	ver, Electronic and Telecommunication ag, Doctoral Academic Studies athematics in Engineering, Doctoral Academic		
18.	DE411	Signal Processing in Medical Research				Engineerin	ver, Electronic and Telecommunication ig, Doctoral Academic Studies ithematics in Engineering, Doctoral Academic		
Rep	Representative refferences (minimum 5, not more than 10)								



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)									
1.	Dragana Bajić: Search, Sequences, Synchronization and States: a different approach, Novi Sad, FTN, recenzenti: dr Werner Teich, University of Ulm, dr Tricia Willinks, CRC Otawa Canada, 2006. 242str., ISBN 86-7892-024-6.									
2.	2. Reichman A., Tacada J., Bajić D., et al: Body Communications, in: Roberto Verdone; Alberto Zanella, (Eds.): Pervasive and Ambient Wireless Communications, Springer, 2012, Hardcover, pp 609-660, ISBN 978-1-4471-2314-9									
3.	Bajić D.: Sequence synchronization technique, in: L. Correia (Ed) Towards Mobile Broadband Multimedia Networks,, Academic Press Elsevier Ltd, Oxford U.K, 2006,ppr. 77-79, ISBN 13: 978-0-12-369422-									
4.	Bajić D., Drajić D.: Statistical Analysis of Digital Signals and Systems, in: Bane Vasić, Erozan Kurtas (ED): Coding and Signal Processing for Magnetic Recording Systems, , CRC Press LLC, New York, 2005,pp. 7-7, ISBN 0-8493-1524-7									
5.	Stefanović Č., Bajić D.: On the Search for a Sequence from a Predefined Set of Sequences in Random and Framed Data Streams, IEEE Transactions on Communications, 2012, Vol. 60, No 1, pp. 189-197, ISSN 0090-6778									
6.	Lončar-Turukalo T., Japundžić-Žigon N., Bajić D.: Temporal Sequence Parameters in Isodistributional Surrogate Data: Model and Exact Expressions, IEEE Transactions on Biomedical Engineering, 2011, Vol. 58, No 1, pp. 16-24, ISSN 0018-9294									
7.	D. Drajić, D. Bajić: "Communication System Performances – Achieving the Ultimate Information-Theoretic Limits?", IEEE Communications Magazine, Vol. 40, No. 6, May 2002. pp 124-129 ISSN 0163-6804.									
8.	D. Bajić: "New simple method for solving the fil 1421. ISSN 0013-5194.	rst passage time probl	em", Electronics	Letters, 1991, Vol. 27. No. 1	6, pp 1419-					
9.	D. Bajić, D. Drajić: "Time-varying Viterbi decod 0013-5194.	ling for correlated data	", Electronics Let	tters, 1993, Vol. 29. No. 4, p	p 335-337. ISSN					
10.	D. Bajić, D. Drajić: "Information theory approact 1667-1668. ISSN 0013-5194.	ch to frame synchronis	ation problem", E	Electronics Letters, 1994, Vo	l. 30. No. 20, pp					
Sui	mmary data for teacher's scientific or art and profe	essional activity:								
Quo	tation total :	156								
Tota	l of SCI(SSCI) list papers :	14								
Curr	ent projects :	Domestic :	1	International:	3					



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	e and last n	ame:			Bajović M. Vera			
Academic title:					Associate Professor			
Name of the institution where the teacher works full time and					Faculty of Technical Sciences - Novi Sad			
starti	ng date:				16.02.1977			
Scier	ntific or art f	ield:			Theoretical Electrotechnics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2011				Theoretical Electrotechnics	
PhD	thesis		1994	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical and Computer Engineering	
Magi	ster thesis		1983	School of Electrical Engi	ineering - Beog	ırad	Electrical Measurements	
Bach	elor's thesi	S	1974	Faculty of Technical Sci	ences - Priština	a	Electroenergetics	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E216	Funda	mentals of	Electrical Engineering		Academic	nputing and Control Engineering, Undergraduate Studies ver Software Engineering, Undergraduate	
	E0901	Fundo	montal alaa	strical anaincoring		Academic (E01) Pow	Studies ver Engineering - Renewble Sources of Electrical	
2.	EOS01			trical engineering			ndergraduate Professional Studies	
3.	H104	Funda	mentals of	Electrical Engineering 1		` '	chatronics, Undergraduate Academic Studies	
4.	E105	Funda	mentals of	Electrical Engineering 1		Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Ùndergrad	asurement and Control Engineering, uate Academic Studies	
5.	E110	Funda	mentals of	Electrical Engineering 2		Engineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Ùndergrad	asurement and Control Engineering, uate Academic Studies	
6.	ETI04	Funda	Fundamentals of Electrical Engineering			(E02) Elector	ctronics and Telecommunications, Undergraduate al Studies	
7.	ETI29	Monito	oring and No	oise Protection		(E02) Elector	ctronics and Telecommunications, Undergraduate al Studies	
8.	DE208S	Select	ed Chapter	s on Electromagnetic Con	npatibility		ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	E1IEP	Investi	gation of el	ectromagnetic fields		( MR0) Me Academic	asurement and Control Engineering, Master Studies	
Ŭ.	L 11L1	11140011	gation of ci	eonomagneno neido			er, Electronic and Telecommunication g, Master Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.				beležja za automatsku izç ičkih nauka u Novom Sad		odlučivanja	u tehničoj dijagnostici sa nedovoljnom apriornom	
2.	Neda Pel	karić-Na	ıđ, Vera Baj	jović: "Zbirka rešenih ispiti	nih zadataka iz	osnova ele	ektrotehnike", Građevinska knjiga, Beograd, 1987.	
3.				era: The impact of proces 2, pp. 143-155, August 20		nt on industr	ial diagnostics, Facta Universitatis, Electronics	
4.				Bajović V., Đurić N.: Verific Environment, Phuket, 2-3		rth Return I	mpedance , 5. PSU-UNS International	
5.	10. Intern	ational	Conference		in Modern Sate		tem for Electromagnetic Environmental Pollution, and Broadcasting Services - TELSIKS, Niš, 5-8	
6.							onitoring in Power System, 16. International ISBN 978-86-7892-355-5	
7.							r Electromagnetic Field Monitoring Information Septembar, 2011, ISBN ISBN: 978-86-6125-04	
8.	Kasaš-Lažetić K., Prša M., Bajović V., Vukobratović B.: Determination of ACSR's Electrical Characteristics, 10. International Conference on Applied Electromagnetics, Niš, 25-29 Septembar, 2011, pp. 1-4, ISBN 978-86-6125-042-2							
9.	Prša M., Kasaš-Lažetić K., Bajović V.: Determination of Earth Impedance, PSU-UNS International Conference on Engineering and							

# SITAS STUD

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## **Study Programme Accreditation**

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

Bajović Vera, Bojković Gordana: Inductive Learning Based Framework For Diagnostic System Building, 3rd International Symposium Interdisciplinary Regional Research, Novi Sad, FR Yugoslavia, September, 1998, pp. 21-23.

Summary data for teacher's scientific or art	t and professional activity:
----------------------------------------------	------------------------------

Summary data for teacher's scientific or art and professional activity:							
Quotation total :	0						
Total of SCI(SSCI) list papers :	0						
Current projects :	Domestic: 0 International: 0						

Strana 196 Datum: 18.12.2012



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	e and last n	ame:			Bašičević V. I	liia		
Academic title:			Assistant Pro	-				
		titution v	vhere the te	eacher works full time and	-			
starting date:			0 1 -		ad Communicati			
	ntific or art f		Year	Institution	Computer En	gineering ar	nd Computer Communication	
							Computer Engineering and Computer	
Acad	lemic title e	lection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Communication	
	thesis		2009	Faculty of Technical Sci			Computer Engineering and Computer Communication	
⊢— <u> </u>	ster thesis		2001	Faculty of Technical Sci			Computer Science	
	elor's thesi		1998	Faculty of Technical Science acher in the accredited stu			Computer Science	
LISU	or courses b	ellig ne	id by the te	acrier in the accredited sit	ady programme	:5		
	ID	Course	e name			Study pro	ogramme name, study type	
						(E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
1.	E23B	Funda	mentals of	Computer Networks 1		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
							er, Electronic and Telecommunication	
							nputing and Control Engineering, Undergraduate	
2.	E23B1	Compi	uter Networ	k Fundamentals 2			ver Software Engineering, Undergraduate	
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
							nputing and Control Engineering, Undergraduate	
3.	RT41	Interco	omputer Co	mmunications and Compu	iter Networks	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
						( SE0) Soft Undergrad	tware Engineering and Information Technologies, luate Academic Studies	
4.	DRT05	Salaat	ad Chantar	o of Computer Communic	otiono	( E20) Con Academic	nputing and Control Engineering, Doctoral Studies	
4.	DK105	Select	eu Griapiei	s of Computer Communic	ations	( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.				se of SIP in the Developm sionals", 2008, Vol. 2, Par			A Case Study", "The Journal of the Institute of	
2.				Kovacevic, "Use Of Publish , June 19-23, 2007	her-Subscriber	Design Pat	tern in Infrastructure of Distributed IDS Systems",	
3.	I.Basicev 2008.	ic, M. P	opovic, D. I	Kukolj, "Comparison of SIF	P and H.323 Pr	otocols", IC	DT 2008, Bucharest, Romania, June 29- July 5,	
4.			sicevic, V.V April 14-16		cutor: New Rur	ntime for Pa	rallelized Legacy Software", ECBS 2009, San	
5.				ession Initiation Protocol, E obal, Hershey, Pennsylva			chnologies and applications, Editors Mario Freire BN 978-1-59140-993-9	
6.		,		est case generation for the 6, pp. 697-706, ISSN 0950	, ,	of architect	ure, Information and Software Technology,	
7.	•			Bašičević I.: Generic meth I, Vol. 7, No 11, pp. 1992-2			parallel programs based on task trees, Scientific	
8.				vić M.: On the Application 007/s10489-009-0190-y, A			ntrol Approach to High Altitude Platform SSN 1573-7497	
9.	Popović M. Počičović I.: Formal verification of embedded coffware based on coffware compliance proporties and evaluate use of							
10.				perational profiles for Stati ol. 10, No 2, pp. 8-16, ISS		f Distributio	n Management System, INFOCOMP Journal of	

# STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication



ı	Liigineeiiig									
	Summary data for teacher's scientific or art and professional activity:									
Quotation total : 10										
I	Total of SCI(SSCI) list papers :	4								
I	Current projects :	Domestic :	1	International:	1					
	, , , , ,	4 Domestic :	1	International :	1					



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name: Bekut						Bekut D. Duško			
Academic title:					Full Professor				
Name of the institution where the teacher works full time starting date:					d -				
Scientific or art field:					Electroenerge	etics			
	lemic caries		Year	Institution			Field		
Acad	lemic title el	ection:	2004	Faculty of Technical So	ciences - Novi S	ad	Electroenergetics		
	thesis		1994	School of Electrical En			Electroenergetics		
	ster thesis		1990	School of Electrical En	•		Electroenergetics		
·	elor's thesis	<u> </u>	1986	Faculty of Technical So			Electroenergetics		
List	of courses b	eina hel	ld bv the te	acher in the accredited s					
	ID	Course	e name		71 0	Study pro	ogramme name, study type		
1.	E126	Systen	n Control, N	Modeling and Simulation			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	EE416	Relay	Protection				er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
3.	ESI001	Softwa	are Tools in	Power Engineering		Àcadémic			
4.	ESI010	Basics	of control	in power systems		Academic (E10) Pow	er, Electronic and Telecommunication		
5.	ESI016	Smart	Grid Progra	amming		Engineering, Undergraduate Academic Studies  ( ES0) Power Software Engineering, Undergraduate Academic Studies			
6.	DE206S	EPS F	ailure			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
7.	EE508	Microp	rocessor P	rotection			E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
8.	EE0514	Comp	uter Applica	ation in Power Systems 2			10) Power, Electronic and Telecommunication ngineering, Master Academic Studies		
9.	DE206	PES F	ailures			( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
Re	oresentative	reffere	nces (minin	num 5, not more than 10	)				
1.	Strezoski Systems	V., Bek	tut D.: A Ca Trans. on F	annonical Model for the S Power Systems, 1991, Vo	Study of Faults in bl. 6, No 4, pp. 1	n Power Sys 493-1499	stems Naziv časopisa: IEEE Trans. on Power		
2.							grounding parts of power systems under fault Y SYSTEMS, (2003) vol.25 br.7 str. 567-575		
3.				ezoski, VC: "Dead zone   \RCH, (2000) vol.56 br.1		distance rel	aying of overhead transmission lines", ELECTRIC		
4.				ekut D., Švenda G.: DMS mal Science, 2012, Vol. 1			reen Distributed Generation Penetration in 0354-9836		
5.				abilistic interrupting curre Electrical Power System			e circuit breakers Naziv časopisa: Electrical 165-170		
6.	Naziv čas	sopisa: I	Electrical P	ower System Research	, Electrical Powe	er System R	of short-circuit currents in three-phase systems lesearch, 1992, No 24, pp. 49-53		
7.	Condition	s, Elect	rical Power	& Energy Systems, ELS	EVIER, 2003,+	No.25, pp. 5	or Calculation on Power Systems Under Fault 567-575, ISSN 0142-0615.,		
8.		ution Ne					he Penetration Of Green Distributed Generation bia, 2012, Vol. 1, No.16, pp. 189 – 203, ISSN:		
9.							Hybrid MV and LV distribution networks, 4. 9-54, ISBN 978-3-934681-72-9		
10.	10. Brbaklić B., Bizumić L., Bekut D.: Alat za automatizovano testiranje DMS softvera Naziv skupa: INFOTEH-JAHORINA, 7. Infoteh, Jahorina, 26-28 Mart, 2008, pp. 685-689, ISBN 99938-624-2-8								
Summary data for teacher's scientific or art and professional activity:									
Quotation total: 17									
Total of SCI(SSCI) list papers : 6									

## ASTAS STUDIO

## UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Current projects: Domestic: 6 International: 14

## DE 3C

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Bogdanović Ž. Vesna				
Academic title:					Senior Lecturer				
Name of the institution where the teacher works full time and				acher works full time and					
starting date:					15.12.1999				
Scier	Scientific or art field:					English			
Acad	Academic carieer Year Institution					Field			
Academic title election: 2009 Faculty of Technical Scientific Scie					ences - Novi Sad		English		
Magi	Magister thesis 2007 Faculty of Philosophy - N				lovi Sad English				
	elor's thesis		1999	Faculty of Philosophy - I					
List	of courses b	eing he	ld by the tea	acher in the accredited stu	dy programmes				
	ID	Course name				Study programme name, study type			
1.	AEJ1L	Englis	h Language	e - Elementary		( A00) Architecture, Undergraduate Academic Studies			
2.	AEJ2L	Englis	h Language	intermediate		( A00) Architecture, Undergraduate Academic Studies			
3.	AEJ2Z	Englis	h intermedia	ate		( A00) Architecture, Undergraduate Academic Studies			
4.	AEJ3Z	Englis	h Language	e - upper intermediate		( A00) Architecture, Undergraduate Academic Studies			
						( G00) Civil Engineering, Undergraduate Academic Studies			
		English Language – Elementary				( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies			
						( M30) Energy and Process Engineering, Undergraduate Academic Studies			
5.	EJ01L					( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies			
						( P00) Production Engineering, Undergraduate Academic Studies			
						( S00) Traffic and Transport Engineering, Undergraduate Academic Studies			
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
		English Language - Elementary				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies			
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
6.	EJ01Z					( Z01) Safety at Work, Undergraduate Academic Studies			
						l <b>ì</b>	0) Clean Energy Technologies, Undergraduate demic Studies		
							( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies		
						(Z20) Environmental Engineering, Undergraduate Academ Studies			
	EJ02L	English Language – Pre-Intermediate					ver, Electronic and Telecommunication ng, Undergraduate Academic Studies		
						( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
						( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies			
7.						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
						( Z01) Safety at Work, Undergraduate Academic Studies			
						( ZC0) Clean Energy Technologies, Undergraduate Academic Studies			
						( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies			
						(Z20) Environmental Engineering, Undergraduate Academ Studies			



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes					
	ID	Course name	Study programme name, study type			
	EJ02Z		( I10) Industrial Engineering, Undergraduate Academic Studies			
8.		English Language – Pre-Intermediate	( I20) Engineering Management, Undergraduate Academic Studies			
0.		English Language – Fre-internediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies			
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
	EJ03Z		( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
9.		English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies			
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
			(Z20) Environmental Engineering, Undergraduate Academ Studies			
	EJ04L	English Language – Upper Intermediate	( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
			( Z01) Safety at Work, Undergraduate Academic Studies			
10.			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
			(Z20) Environmental Engineering, Undergraduate Academic Studies			
	EJ1Z		( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( ES0) Power Software Engineering, Undergraduate Academic Studies			
		English Language - Elementary	( F10) Engineering Animation, Undergraduate Academic Studies			
11.			( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies			
			(AH0) Architecture, Master Academic Studies			
	EJ2L		( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
12.		English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologic Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies			

# ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
	EJ2Z		( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
13.		English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
	EJ3L	English Language – Advanced	( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
14.			( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
15.	EJE5	English Language – First Certificat 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
16.	EJE6	English Language - First Certificate 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
17.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies				
18.	EJEI1	English in Engineering 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
19.	EJEI2	English in Engineering 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
20.	EJF5	English Language for GRID 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
21.	EJF6	English Language for GRID 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
22.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies				
	EJM	English Language – ESP Course	( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies				
23.			( M30) Energy and Process Engineering, Undergraduate Academic Studies				
25.			( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies				
			( P00) Production Engineering, Undergraduate Academic Studies				
24.	EJPST	English Language in Postal Traffic	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies				
25.	EJSIT	English Language in Traffic and Transport	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies				
26.	EJZ	English Language - Specialized	(Z20) Environmental Engineering, Undergraduate Academic Studies				
27.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
28.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
29.	ISIT07	English Language 2	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies				
30.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				

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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
31.	ASI431	English Language 2	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				
32.	BMI80	English 1	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
33.	BMI81	English 2	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
34. EJIIM English for Specific Purposes		English for Specific Purposes	( I10) Industrial Engineering, Undergraduate Academic Studies				
			( 120) Engineering Management, Undergraduate Academic Studies				
	EJ1Z		( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
35.		English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
	EJ2Z		( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
		English Language – Intermediate	( F10) Engineering Animation, Undergraduate Academic Studies				
36.			( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
37.	eja						
38.	EJE7	English Language - Advanced	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
39.	F507	English Language for GRID 3	( F00) Graphic Engineering and Design, Master Academic Studies				
40.	NIT03	Business English	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more than 10)					
1.	Vesna M	arković, English in Civil Engineering, FTN Izdavaštvo, Novi	Sad, 2004.				
2.	Vesna Bogdanović, Ivana Mirović, Engleski jezik za grafičko inženjerstvo i dizajn 1, FTN Izdavaštvo, Novi Sad, 2007.						
3.	Ivana Mirović, Vesna Bogdanović, Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN Izdavaštvo, Novi Sad, 2008						
4.	Vesna Marković, English in Civil Engineering, drugo izdanje, FTN Izdavaštvo, Novi Sad, 2008.						
5.	University of Novi Sad, Faculty of Technical Sciences, prevele: Marina Katić, Vesna Marković, Ivana Mirović, Fakultet tehničkih nauka, Novi Sad, 2004.						
6.	Mr Vesna Bogdanović, Pačvork romani Alis Voker i Toni Morison, Beograd: Zadužbina Andrejević, 2009, ISBN 978-86-7244-743-9						
7.	Bogdanović Vesna, Mirović Ivana, Ličen Branislava, Kreiranje udžbenika za stručni engleski jezik za studente različitog predznanja, Zbornik radova međunarodne konferencije Jezik struke – teorija i praksa, DSJKS, Beograd, 2008: 445-454						
8.	Mirović Ivana, Bogdanović Vesna, Ličen Branislava, Istorijat nastave stručnog engleskog jezika na FTN-u u Novom Sadu, Zbornik						
	radova međunarodne konferencije Jezik struke – teorija i praksa, DSJKS, Beograd, 2008: 170-176						

## TAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

- 9. Bulatović Vesna, Gak Dragana, Bogdanović Vesna, Nastava stranih jezika na privatnom fakultetu, Zbornik radova međunarodne konferencije Jezik struke teorija i praksa, DSJKS, Beograd, 2008: 329-332
- Gak Dragana, Bulatović Vesna, Bogdanović Vesna, Poređenje nastave engleskog jezika na privatnom i državnom fakultetu, Zbornik radova međunarodne konferencije Jezik struke teorija i praksa. DSJKS, Beograd. 2008; 705-712

10.	Zbornik radova međunarodne konferencije Jezik struke – teorija i praksa, DSJKS, Beograd, 2008: 705-712						
Su	Summary data for teacher's scientific or art and professional activity:						
Quo	tation total :	0					
Tota	l of SCI(SSCI) list papers :	0					
Current projects :		Domestic :	0	International :	0		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Bojković J. Gordana					
Acad	lemic title:				Associate Professor			
		titution v	vhere the te	acher works full time and	Faculty of Te	Faculty of Technical Sciences - Novi Sad		
	ng date:				01.10.1975			
	ntific or art f				Electrical Measurements			
	lemic caries		Year	Institution			Field	
Acad	lemic title el	lection:	2010				Electrical Measurements	
Ť	ster thesis		2000	School of Electrical Engi			Electrical Measurements	
	thesis		1994	Faculty of Technical Science		ad	Electrical Measurements	
	elor's thesis	-	1971	Faculty of Electronic Eng			Electronics	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E130A	Electri	cal Measur	ements		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE420A	Measu	rement sys	tems in power sector			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	El410	Biophy	/sics				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EIDMS1			ased measurement and da	ata	Undergrad	asurement and Control Engineering, uate Academic Studies	
		acquis	ition systen	is i		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
		Microprocessor based measurement and data acquisition systems 2			nto		asurement and Control Engineering, uate Academic Studies	
5.	EIDMS2				ald	_	er, Electronic and Telecommunication	
			-				g, Undergraduate Academic Studies	
6.	EIEEM	Electrical and electronic measurements				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
7.	EIEEMI	Electri	cal and elec	ctronic measurements in ir	ndustry		asurement and Control Engineering, uate Academic Studies	
8.	EIJNZZ	Ionizin	g and Non-	Ionizing Radiation and Pro	otection	Studies	medical Engineering, Undergraduate Academic	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Studies	medical Engineering, Undergraduate Academic	
9.	EIMMB M	Methods of measurement and measuremen systems in biomedicine			nt-acquisition	Ùndergrad	asurement and Control Engineering, uate Academic Studies	
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
10.	EIPR1	Labora	atory praction	cum		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
11.	MR0UL R	Introdu	uction to lab	oratory practice		Ùndergrad	asurement and Control Engineering, uate Academic Studies	
12.	SI019	Quality	/ in Biomed	icine			ver, Electronic and Telecommunication g, Specialised Professional Studies	
13.	SI048	Measu	rement Sys	stems in the Field of Biome	edicine		ver, Electronic and Telecommunication g, Specialised Professional Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.				anov: "A Microprocessor b 984, Zagreb,pp.63-68, 19		of multichanr	nel measuring system for temperature regulation",	
2.							urements in distribution networks", Proc. 11th Oktober 31- November 2, 2001.	
3.				o, G.Bojković: "Developme of Novi Sad, Yugoslavia. (		s of the diag	nostic methodology based on machine learning",	

## ASTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10) D. Kukolj, V. Bajović, V. Kovačević, G. Bojković, "Fault Diagnosis by Combined Machine Learning Techniques", Second World Automatic Congress, WAC "96, First International Symposium on Intelligent Automation and Control, Montpellier, France, May G. Bojković, M. Nimrihter, V. Bajović, "MEASUREMENT-ACQUISITION SYSTEMS AND CONTROL", Proc. 11th International 5 Symposium on Power Electronics - Ee 2001, Noi Sad, Yugoslavia, Oktober 31- November 2, 2001 V. Bajović, I. Konvalinka, G. Bojković, "Leak Detection On Outlet Pipes of Gas Transmission System Using Artificial Intelligence 6 Methods," (in Serbo-Croatian with abstract in English) Proc. of the XXXVI Yug. Conf. ETAN, Kopaonik, YU, 1992 I. Konvalinka, V. Kovačević, V. Bajović, G. Bojković, "Decision Trees Development for Leak Detection on Gas Transmission 7. System Using Stationary Model and Machine Learning from Examples," Proc. of the First International Conference on Intelligent Systems Engineering, Edinburgh, UK, Aug. 19-21, 1992, pp. 330-335. G. Bojković, V. Bajović, "THE IMPACT OF PROCESS MEASUREMENT ON INDUSTRIAL DIAGNOSTICS", Facta Universitates, 8 Vol. 13, No. 2, August 2000, 143--155 V. Bajović, G. Bojković, V. Kovačević, "Knowledge based system for faulty components detection in production testing of 9 electronic device", International Symposium on Electronics and the Environment, San Francisco, CA, USA, pp. 257-260, 1997. M. Nimrihter, G. Bojković, V. Bajović, Z. Radojević, "State Estimation in Radial Distribution Networks", International Conference on 10 Operations Research, 2 - 5 September, Klagenfurt, Austria. Summary data for teacher's scientific or art and professional activity: Quotation total 0 Total of SCI(SSCI) list papers : n 0 0 Current projects Domestic: International:

## FACULTY OF TE

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Full Professor	Name and last name:					Borovac A. Branislav			
Name of the institution where the teacher works full time and starting date:									
starting date:    1.10.1975   Mechatronics, Robotics and Automation and Integral Systems			itution v	vhere the te	eacher works full time and				
Academic tarleer Year Institution Field Academic title election: 1998 Faculty of Technical Sciences - Novi Sad Mechatronics, Robotics and Automation and Integral Systems PhD thesis 1986 Faculty of Technical Sciences - Novi Sad Robotics and Flexible Automation Magister thesis 1982 Faculty of Technical Sciences - Novi Sad Robotics and Flexible Automation Bachelor's thesis 1975 Faculty of Technical Sciences - Novi Sad Robotics and Flexible Automation Bachelor's thesis 1975 Faculty of Technical Sciences - Novi Sad Mechanical Engineering List of courses being held by the teacher in the accredited study programmes    D	starti	ng date:				01.10.1975			
Academic title election: 1998   Faculty of Technical Sciences - Novi Sad   Mechatronics, Robotics and Automation and Integral Systems   1986   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1982   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1975   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1975   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1975   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1975   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Rapiclet rhesis   1975   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation   Robotics   Robotics	Scier	ntific or art f	ield:			Mechatronics, Robotics and Automation and Integral Systems			
Pacademic titue election: 1996   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation	Acad	emic caries	er	Year	Institution			Field	
Magister thesis   1982   Faculty of Technical Sciences - Novi Sad   Robotics and Flexible Automation	Acad	emic title el	ection:	1998	Faculty of Technical Sci	ences - Novi S	ad	·	
Bachelor's thesis   1975   Faculty of Technical Sciences - Novi Sad   Mechanical Engineering    List of courses being held by the teacher in the accredited study programmes      10	PhD	thesis		1986	Faculty of Technical Science	ences - Novi S	ad	Robotics and Flexible Automation	
List of courses being held by the teacher in the accredited study programmes    ID   Course name   Study programme name, study type	Magi	ster thesis		1982	Faculty of Technical Sci	ences - Novi S	ad	Robotics and Flexible Automation	
ID   Course name   Study programme name, study type	Bach	elor's thesis	3	1975	Faculty of Technical Sci	ences - Novi S	ad	Mechanical Engineering	
1. EM436 Mechatronics (M30) Energy and Process Engineering, Undergraduate Academic Studies (H00) Mechatronics, Undergraduate Academic Studies (H40) Mechatronics, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (H40) Mechatronics, Undergraduate Academic Studies (H00) Mechatronics, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (H00) Mechatronics and Technical Design, Undergraduate Academic Studies (H00) Mechatronics Ansater Academic Studies (H00) Mechatronics, Master Academic Studies (H00) Mechatronics, Master Academic Studies (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (H00) Mechatronics, Master Academic Studies (H00) Mec	List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
1. Envisor Mechatronics 2. H102 Fundamentals in Product Development 3. H1404 Mechatronics 4. H308 Mechatronics 4. H308 Industrial Robotics 4. H308 Industrial Robotics 5. I600 Industrial Robotics 6. BM116A Basics of medical robotics 7. EM436A Mechatronics 8. II11035 Industrial Robotics 8. II11035 Industrial Robotics 9. H1503 Non Industrial Robotics 11. HDOK1 Selected topics in industrial robotics 12. IMDOX Selected topics in industrial robotics 13. NIT05 Advanced Technology for Material Handling 14. AD0007 Interactive systems in architecture 15. H828 Advanced robotics 16. BH29 Advanced robotics 17. IIDS6 Selected chapters in automation 18. IIDS6 Selected chapters in automation 19. H829 Advanced robotics 19. H829 Advanced robotics 10. H008 Selected chapters in automation 11. IIDS6 Selected chapters in automation 12. IIDS6 Selected chapters in automation 13. Selected chapters in automation 14. AD0007 Industrial Engineering, Abster Academic Studies 16. H829 Advanced robotics 17. IIDS6 Selected chapters in automation 18. IIDS6 Selected chapters in automation 19. H829 Advanced robotics 19. H829 Advanced robotics 10. H829 Advanced robotics 10. H829 Advanced robotics 10. H829 Advanced robotics 10. H829 Advanced robotics 11. IIDS6 Selected chapters in automation 12. IIDS6 Selected chapters in automation 13. OCCUPATION Advanced Repairs in automation 14. GD018 Advanced robotics 15. H829 Advanced robotics 16. H829 Advanced robotics 17. IIDS6 Selected chapters in automation 18. GD018 Automation and Robotics in Construction 19. IIDS6 Selected chapters in automation 10. II		ID	Course	e name			Study pro	ogramme name, study type	
3. H1404 Mechatronics (H00) Mechatronics, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (MR0) Measurement and Control Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (I10) Industrial Engineering, Specialised Academic Studies	1.	EM436	Mecha	tronics					
3. H1404   Mechatronics	2.	H102	Funda	mentals in	Product Development		( H00) Med	chatronics, Undergraduate Academic Studies	
4. H308 Industrial Robotics (1400) Mechatronics, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (IF10) Engineering Animation, Undergraduate Academic Studies  (IF10) Engineering Animation, Undergraduate Academic Studies  (IF10) Engineering Animation, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Master Academic Studies  (I10) Industrial Engineering, Master Academic Studies  (I11) Industrial Engineering, Master Academic Studies  (I11) Industrial Engineering, Specialised Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (I13) Industrial Engineering, Specialised Academic Studies  (I14) Industrial Engineering, Specialised Academic Studies  (I15) Industrial Engineering, Specialised Academic Studies  (I16) Industrial Engineering, Master Academic Studies  (I17) Industrial Engineering, Master Academic Studies  (I18) Industrial Engineering, Master Academic Studies  (I19) Industrial Engineering, Master Academic Studies  (I10) Industrial Engineering, Master Academic Studies  (I10) Industrial Engineering, Master Academic Studies  (I10) Indus							( H00) Med	chatronics, Undergraduate Academic Studies	
Selected topics in industrial robotics	3.	H1404	Mecha	tronics					
Studies  (MR0) Measurement and Control Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (BM0) Biomedical Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Undergraduate Academic Studies  (H00) Mechatronics, Master Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Specialised Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (H00) Mechatronics, Master Academic Studies  (I11) Industrial Engineering, Specialised Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (I12) Engineering Management, Specialised Academic Studies  (I12) Engineering Management, Specialised Academic Studies  (INT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  (INT) Industrial Engineering, Specialised Academic Studies  (INT) Industrial Engineering, Dectoral Academic Studies  (INT) Industrial Engineering, Doctoral Academic Studies  (INT) Industrial Engineeri	4.	H308	Industi	rial Robotic	s		( H00) Med	chatronics, Undergraduate Academic Studies	
Undergraduate Academic Studies								ineering Animation, Undergraduate Academic	
Engineering, Undergraduate Academic Studies  (BM0) Biomedical Engineering, Undergraduate Academic Studies  (BM0) Biomedical Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Undergraduate Academic Studies  (I10) Industrial Engineering, Undergraduate Academic Studies  (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (H00) Mechatronics, Master Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E11) Industrial Engineering, Specialised Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  (NIT) Industrial Engineering, Design and Production in Architecture and Urban Planning, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Industrial Engineering, Dectoral Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (I10) Industrial Engineering, Specialised Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (M40) Technical Mechanics and Technical Design,	5.	1600	Industi	Industrial Robotics					
Studies   Studies   Tel.									
Recriationics   Engineering, Undergraduate Academic Studies	6.	BM116A	Basics of medical robotics					medical Engineering, Undergraduate Academic	
8. III035 Industrial robotics    Studies	7.	EM436A	Mecha	tronics					
9. H1503 Non Industrial Robotics and Automation in Buildings  10. HDOK1 S Selected topics in industrial robotics  11. HDOK2 S Selected topics in non-industrial robotics  12. IMDROS Selected chapters in enterprise's design, organization and control  13. NIT05 Advanced Technology for Material Handling  14. AD0007 Interactive systems in architecture  15. H828 Advanced robotics  16. H829 Advanced robotics  17. IIDS6 Selected chapters in automation  18. GD018 Automation and Robotics in Construction  (H00) Mechatronics, Master Academic Studies  (AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Mechatronics and Technical Design, Master Academic Studies  (H00) Mechatronics and Technical Academic Studies  (H00) Mechatron	g.	111035	Industi	rial robotics				strial Engineering, Undergraduate Academic	
9. H1503 Non Industrial Robotics and Automation in Buildings  10. HDOK1 Selected topics in industrial robotics  11. HDOK2 Selected topics in non-industrial robotics  12. IMDR0S Selected chapters in enterprise's design, organization and control  13. NIT05 Advanced Technology for Material Handling  14. AD0007 Interactive systems in architecture  15. H828 Advanced robotics  16. H829 Advanced robotics  17. IIDS6 Selected chapters in automation  18. GD018 Automation and Robotics in Construction  (110) Industrial Engineering, Master Academic Studies  (1112) Industrial Engineering, Specialised Academic Studies  (1122) Engineering Management, Specialised Academic Studies  (1123) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  (1124) Industrial Engineering, Specialised Academic Studies  (1125) Engineering - Advanced Engineering Technologies, Master Academic Studies  (1126) Industrial Engineering, Master Academic Studies  (1127) Industrial Engineering, Master Academic Studies  (1128) Industrial Engineering, Master Academic Studies  (1129) Industrial Engineering, Master Academic Studies  (1129) Industrial Engineering, Doctoral Academic Studies  (1129) Industrial Engineering, Specialised Academic Studies  (1129) Industrial Engineering, Doctoral Academic Studies  (1129) Industrial Engineering, Doctoral Academic Studies  (129) Industrial Engineering, Doctoral Academic Studies	0.	111000	maasu	nai robolics					
10. HDOK1 S Selected topics in industrial robotics (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  11. HDOK2 S Selected topics in non-industrial robotics (112) Industrial Engineering, Specialised Academic Studies  12. IMDROS Selected chapters in enterprise's design, organization and control (122) Engineering, Specialised Academic Studies (122) Engineering Management, Specialised Academic Studies (122) Engineering Management, Specialised Academic Studies (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies (AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies (H00) Mechatronics, Master Academic Studies (110) Industrial Engineering, Specialised Academic Studies (1112) Industrial Engineering, Doctoral Academic St	g	H1503	Non In	dustrial Ro	hotics and Automation in F	Ruildings	( H00) Med	chatronics, Master Academic Studies	
10. S   Selected topics in industrial robotics   Engineering, Specialised Academic Studies     11. HDOK2   Selected topics in non-industrial robotics   (112) Industrial Engineering, Specialised Academic Studies     12. IMDROS   Selected chapters in enterprise's design, organization and control   (122) Engineering Management, Specialised Academic Studies     13. NIT05   Advanced Technology for Material Handling   (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies     14. AD0007   Interactive systems in architecture   (AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies     15. H828   Advanced robotics   (H00) Mechatronics, Master Academic Studies     16. H829   Advanced robotics   (M40) Technical Mechanics and Technical Design, Master Academic Studies     17. IIDS6   Selected chapters in automation   (112) Industrial Engineering, Doctoral Academic Studies     18. GD018   Automation and Robotics in Construction   (G00) Civil Engineering, Doctoral Academic Studies     18. GD018   Automation and Robotics in Construction   (M11) Mathematics in Engineering, Doctoral Academic		111000	11011111						
12. IMDROS Selected chapters in enterprise's design, organization and control  Selected chapters in enterprise's design, organization and control  Selected chapters in enterprise's design, organization and control  (122) Engineering Management, Specialised Academic Studies  (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  (ADO) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (H00) Industrial Engineering, Master Academic Studies  (I10) Industrial Engineering, Master Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (G00) Civil Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic	10.	S	Select	ed topics in	industrial robotics				
12. IMDR0S   Selected chapters in enterprise's design, organization and control   (122) Engineering Management, Specialised Academic Studies   (122) Engineering Management, Specialised Academic Studies   (121) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies   (122) Engineering Management, Specialised Academic Studies   (123) Engineering Master Academic Studies   (123) Engineering, Specialised Academic Studies   (123) Engineering, Specialised Academic Studies   (123) Engineering, Doctoral Academic Studies   (123) Engineering, Engineering, Doctoral Academic Studies   (123) Engineering, Doctoral Academic Studies   (123) Engineering, Engineering, Doctoral Academic Studies   (123) Engineering, Doctoral Academic Studies   (123) Engineering, Engineering, Doctoral Academic Studies   (123) Engineering, Engin	11.		Select	ed topics in	non-industrial robotics		( I12) Indus	strial Engineering, Specialised Academic Studies	
13. NTOS Advanced Technology for Material Hariding Technologies, Master Academic Studies  14. AD0007 Interactive systems in architecture (AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies  15. H828 Advanced robotics (H00) Mechatronics, Master Academic Studies  16. H829 Advanced robotics (M40) Technical Mechanics and Technical Design, Master Academic Studies  17. IIDS6 Selected chapters in automation (I12) Industrial Engineering, Specialised Academic Studies  18. GD018 Automation and Robotics in Construction (OM1) Mathematics in Engineering, Doctoral Academic	12.				s in enterprise's design, or	ganization	( I22) Engi	0 0, 1	
14. AD0007 Interactive systems in architecture  Architecture and Urban Planning, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (110) Industrial Engineering, Master Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (H00) Mechatronics, Master Academic Studies  (M40) Technical Mechanics and Technical Design, Master Academic Studies  (I12) Industrial Engineering, Specialised Academic Studies  (G00) Civil Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic	13.	NIT05	Advan	ced Techno	ology for Material Handling	)			
16. H829   Advanced robotics   (110) Industrial Engineering, Master Academic Studies (M40) Technical Mechanics and Technical Design, Master Academic Studies     17. IIDS6   Selected chapters in automation   (112) Industrial Engineering, Specialised Academic Studies     18. GD018   Automation and Robotics in Construction   (001) Mathematics in Engineering, Doctoral Academic	14.	AD0007	Interac	ctive system	ns in architecture				
16. H829   Advanced robotics	15.	H828	Advan	ced robotic	s		( H00) Med	chatronics, Master Academic Studies	
Academic Studies  17. IIDS6 Selected chapters in automation (I12) Industrial Engineering, Specialised Academic Studies  (G00) Civil Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic							( I10) Indus	strial Engineering, Master Academic Studies	
18. GD018 Automation and Robotics in Construction (G00) Civil Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic	16.	H829	Advan	ced robotic	s 		( M40) Technical Mechanics and Technical Design, Master Academic Studies		
18. GD018 Automation and Robotics in Construction (OM1) Mathematics in Engineering, Doctoral Academic	17.	IIDS6	Select	ed chapters	in automation		( I12) Indus	strial Engineering, Specialised Academic Studies	
, , , , , , , , , , , , , , , , , , ,	18.	GD018	Autom	ation and R	Robotics in Construction		'		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programi	me name, study type					
					ectronic and Telecommunic ctoral Academic Studies	ation				
19.	HDOK-1	Sologtod Chapters in Industrial Pobe	otice	( H00) Mechatronics, Doctoral Academic Studies						
19.		Selected Chapters in Industrial Robo	DilCS	( M40) Technica	l Mechanics, Doctoral Acad	emic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic				
					ectronic and Telecommunic ctoral Academic Studies	ation				
				( H00) Mechatro	nics, Doctoral Academic Stu	ıdies				
20.	HDOK-2	Selected Chapters in Non-Industrial	Robotics	( I20) Industrial E Doctoral Acader	Engineering / Engineering M nic Studies	anagement,				
				( M40) Technica	l Mechanics, Doctoral Acad	emic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic				
	LIDOM 1			( H00) Mechatro	nics, Doctoral Academic Stu	udies				
21.	HDOKL1	Selected topics in non-industrial robo	otics	( M00) Mechanio	cal Engineering, Doctoral Ac	ademic Studies				
				( M40) Technica	Mechanics, Doctoral Acad	emic Studies				
22.	HDOKL2	Selected topics in non-industrial robo	otics	( H00) Mechatro	nics, Doctoral Academic Stu	udies				
	Colocted topics in flori industrial resolution			( M40) Technica	emic Studies					
23.	IMDR0	MDR0 Science of Industrial Engineering and Management (120) Industrial Engineering / Engineering Manage Doctoral Academic Studies								
24.	IMDR80 Selected chapters in automation (120) Industrial Engineering / Engineering Management Doctoral Academic Studies									
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.		oratović, V. Potkonjak, K. Babković, B Dynamics, Volume 17, Number 1, (Fe								
2.		ović M., Borovac B., Potkonjak V., To (2007) Vol. 25, pp. 87-101	wards a Unified Under	standing of Basic	Notions and Terms in Hum	anoid Robotics,				
3.		ović M., Borovac B., Potkonjak V., ZM o. 2 (2006), pp. 153-176	IP: A Review of Some	Basic Misunder-s	standings, Int. Jour. of Huma	anoid Robotics,				
4.		njak, M. Vukobratović, K. Babković, B. s and Verification, Int. Jour. of Human				otion: Feasibility,				
5.		ović M., Borovac B., Babković K., "Co d Robotics, Vol. 2, No. 3 (2005), pp. 3		of Anthropomorp	hism of Humanoid Robots",	Int. Jour. of				
6.		ović M., Borovac B., Note on the Artic , Vol. 2, No.2, June 2005, pp. 225-227		t- Thirty Five Yea	rs of its Life", Int. Jour. of Hu	ımanoid				
7.		ović M., Borovac B., "Zero-Moment Po 004, pp. 157-173	oint- Thirty Five Years	of its Life", Int. Jo	our. of Humanoid Robotics, \	Vol. 1, No.1,				
8.	M. Vukok Advance	oratović, D. Andrić, B. Borovac, "How t d Robotic Systems, Vol. 1., No. 2, Pa	to Achieve Various Ga ge 99-108, 2004	it Patterns from S	ingle Nominal ", Internation	al Journal of				
9.		A. Vujanić, N. Adamović, L. Nagy, B. onics, Vol. 11, (2001), pp.869-897	Borovac "A Platform f	or Micro-Position	ing Based on Piezo-Legs", 7	he Journal of				
10.	Patterns	oratović, D. Andrić, B. Borovac, "Huma from a Single Nominal ", Cutting Edge /er-lag Robert Mayer-Scholz, © 2005	Robotics, Edited by \	/. Kordic, A. Laza	nica, M. Merdan, Published					
Sur	nmary data	for teacher's scientific or art and profe	essional activity:							
	ation total :		1998							
		CI) list papers :	35							
Curre	Current projects:  Domestic: 2 International: 1									



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Bošković M. Dragan			
Acad	Academic title:			Associate Professor				
	e of the inst ng date:	itution v	vhere the te	eacher works full time and				
Scier	ntific or art f	ield:			Information-Communication Systems			
Acad	lemic caries	er	Year	Institution		Field		
Acad	lemic title el	ection:	2009				Information-Communication Systems	
PhD	thesis		1991	University of Bath - Brist			Electrical and Computer Engineering	
	ster thesis		1988	School of Electrical Engi			Electrical and Computer Engineering	
	elor's thesis		1983	School of Electrical Eng			Electrical and Computer Engineering	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es i		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EM404A	Compi	uter Electro	nics		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( I10) Indus	strial Engineering, Undergraduate Academic	
2.	IM1512	Object	-oriented Ir	fromation Technologies			neering Management, Undergraduate Academic	
3.	IM1515	Mobile	informatio	n technologies		(I20) Engin Studies	neering Management, Undergraduate Academic	
4.	IM1520	Servic	e-Oriented	Architectures		Studies	neering Management, Undergraduate Academic	
5.	IIDS8 Selected chapters from Information, manage communication systems			ement and	Studies	desy and Geomatics, Specialised Academic		
						<del>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </del>	strial Engineering, Specialised Academic Studies	
6.	IM2507	Automation of production systems managemen			ment	` ′	strial Engineering, Master Academic Studies neering Management, Master Academic Studies	
7.	IM2517	M2517 e Government systems				(I20) Engin	neering Management, Master Academic Studies	
8.	IMDS73	Select	ed chapters	s from Information manage	ement	( I22) Engi Studies	neering Management, Specialised Academic	
9.	IMDR73	Select	ed chapters	s from Information manage	ement		strial Engineering / Engineering Management, cademic Studies	
10.	IMDR81		ed chapters unication sy	s from Information, manag vstems	ement and		strial Engineering / Engineering Management, cademic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.		ons on	Microwave				les under LSE and LSM polarization', IEEE le: 5 On page(s): 916-924 Digital Object Identifier:	
2.							spectives of end-to-end reconfigurability", IEEE 3, Issue 3, June 2006 Page(s):46 – 57.	
3.							L: autonomic management platform for seamless /olume 44, Issue 6, June 2006 Page(s):118 – 127.	
4.	VTC 200 9 May 20	1 Spring 01 Page	j. Volume 4	, 6- 2765 vol.4 Digital Object I	-	IEEE VTS 5	53rd Vehicular Technology Conference, 2001.	
5.	D. Bosc	ovic, M.	Needham,				erations in designing and operating Content er Publishers 2010	
6.	Dragan I	Boškovi	ć, Faramak	Vakil, Content Delivery November 2009	_			
7.	Vehicular	Techno	ology Confe	ee, A.; Boscovic, D.; Bus rence, 2006. VTC 2006-S 109/VETECS.2006.16827	pring. IEEE 63		d Reconfigurable Systems 1, 2006 Page(s):57 - 61	
8.	•	Tosic, St	c, Vakil Far tanisa Daut	·	DN for greenin	g video stre	aming to mobile devices ,– MiPRO conference,	

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)							
9.	Dragan Boskovic, Vakil Faramak, Milenko Tosic, Stanisa Dautovic, Greening of video streaming to mobile devices by pervasive wireless CDN – Journal of Green Engineering, ISSN 1904-4720, River Publishers 2011							
10.	Ning Xu, Jin Yang, Mike Needham, Dragan Boscovic, Faramak Vakil - Toward the Green Video CDN IEEE/ACM Int'l Conference on Green Computing Hangshou, Zhejiang Province, China, December 18-December 2010							
Sur	Summary data for teacher's scientific or art and professional activity:							
Quotation total: 30								

10.	IEEE/ACM Int'l Conference on Green Computing Hangshou, Zhejiang Province, China, December 18- December 2010								
Summary data for teacher's scientific or art and professional activity:									
Quo	tation total :	30							
Tota	l of SCI(SSCI) list papers :	5							
Curr	ent projects :	Domestic :	0	International:	1				
	·								

Strana 211 Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Crnojevic					Crnojević S. \	S. Vladimir		
Acad	Academic title:			Associate Professor				
		itution v	vhere the te	acher works full time and	Faculty of Ted	ulty of Technical Sciences - Novi Sad		
					10.11.1995			
Scie	ntific or art f	ield:			Telecommuni	cations and	Signal Processing	
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	ection:	2010				Telecommunications and Signal Processing	
PhD	thesis		2004	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
Magi	ster thesis		1999	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
Bach	elor's thesis	3	1995	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
List o	of courses b	eing hel	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EK412	Shape	Recognitio	n		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
						( F10) Eng Studies	ineering Animation, Undergraduate Academic	
2.	EK421	Digital	Image Prod	cessing			tal Traffic and Telecommunications, uate Academic Studies	
						Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	URZP32	Systen	ns for Detec	ction, Alarm and Warning		Ùndergrad	aster Risk Management and Fire Safety, uate Academic Studies	
4.	BM129A	Digital	Image Prod	cessing		Studies	medical Engineering, Undergraduate Academic	
5.	E137	Basics of Telecommunications					er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EK463	Pattern Recognition				Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
7.	DE311S	E311S Selected topics in Pattern Recognition				(E11) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	DE412S	Digital	image proc	essing algorithms			ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	DE511S	Wirele	ss sensor n	etworks			ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	EK520	Medica	al Image Pr	ocessing			er, Electronic and Telecommunication g, Master Academic Studies	
				· -	•	( F20) Engineering Animation, Master Academic Studies		
11.	EK522	Comp	uter Vision (	Digital Image Processing	2)		er, Electronic and Telecommunication g, Master Academic Studies	
12.	H1420	Funda	mentals in I	Mechanical Vision			chatronics, Master Academic Studies	
		Compi	uter Vision i	n Industrial Engineering a	ınd	( I12) Indus	strial Engineering, Specialised Academic Studies	
13.	IMDS54		jement			( I22) Engineering Management, Specialised Academic Studies		
14.	ZP508	Design	and Maint	enance of the Fire Detect	ion Systems	( ZP1) Disa Academic	aster Risk Management and Fire Safety, Master Studies	
15.	DE311	Select	ed Chapters	s in Pattern Recognition		, ,	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
16.	DE412	Digital	Image Pro	cessing Algorithms			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
10.	DL+12	Digital	maye F100	Scooning Algorithms		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
17.	DE511	Wirele	ss Sensor N	Networks			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
18.	18. IMDR54 Computer Vision in Industrial Engineering and Management (120) Industrial Engineering / Engineering Management, Doctoral Academic Studies					strial Engineering / Engineering Management, cademic Studies		
Rep	Representative refferences (minimum 5, not more than 10)							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	presentative refferences (minimum 5, not more the	nan 10)							
1.	Dejan Vukobratovic, Cedomir Stefanovic, Vlad Data Gathering in Wireless Sensor Networks", 1179, September 2010.		,		• • •				
2.	Petrovic, N.I.; Crnojevic, V.: Universal Impulse Noise Filter Based on Genetic Programming, IEEE Transactions on Image Processing, 2008, Vol. 17, No. 7, str. 1109- 1120, ISSN 1057-7149								
3.	D. Culibrk, M. Mirkovic, V.Zlokolica, M. Pokric IEEE Trans. on Image Processing, Volume: 20				uality Assessment",				
4.	Cedomir Stefanovic, Dejan Vukobratovic, Francesco Chiti, Lorenzo Niccolai, Vladimir Crnojevic, Romano Fantacci: "Urban Infrastructure-to-Vehicle Traffic Data Dissemination Using UEP Rateless Codes", IEEE Journal on Selected Areas in Communications, Vol. 29, No. 1, pp. 94-102, January 2011.								
5.	Vladimir Crnojević, Nemanja Petrović, "Impulse Noise Filtering Using Robust Pixel-Wise S-estimate of Variance", EURASIP Journal on Advances in Signal Processing, vol. 2010, Article ID 830702, 10 pages, 2010,								
6.	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, vol.11, No. 7, 2004, str. 589-593. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, vol.11, No. 7, 2004, str. 589-593.								
7.	B. Antić, V. Crnojević, "Joint Domain-Range N 4678, Springer-Verlag, Berlin Heidelberg 2007	• ,	cenes with Adap	tive Kernel Bandwidth"	, pp.777-788, LNCS				
8.	N. Petrović, V. Crnojević, "Evolutionary Tree-S Verlag, Berlin Heidelberg 2006.	tructured Filter for Imp	ulse Noise Rem	oval", pp.103-113, LNC	S 4179, Springer-				
9.	N. Petrović, V. Crnojević, "Impulse Noise Dete 3708, Springer-Verlag, Berlin Heidelberg 2005		t Statistics and G	Senetic Programming",	pp.643-649, LNCS				
10.	V. Crnojević,"Impulse Noise Filter With Adaptiv Italy, 11-14. September, 2005.	ve Mad-Based Thresho	old", Internationa	l Conference on Image	Processing, Genoa,				
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	135							
Tota	l of SCI(SSCI) list papers :	10							
Current projects: Domestic: 3 International: 10									



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Crnojević-Bengin B. Vesna				
Acad	Academic title:				Associate Professor				
		titution v	vhere the te	eacher works full time and					
	ng date:				15.11.1998				
Scie	ntific or art f	ield:			Electronics	nics			
Academic carieer Year Institution				Institution			Field		
Acad	lemic title e	lection:	2011				Electronics		
PhD	thesis		2006	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
Magi	ster thesis		1997	School of Electrical Engi			Telecommunications and Signal Processing		
Bach	elor's thesi	S	1994	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	EM440	Comp	uter-Aided E	Electronic Circuit Design			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	URZP32	Syster	ns for Detec	ction, Alarm and Warning			aster Risk Management and Fire Safety, uate Academic Studies		
3.	ASO	Introdu	uction to en	gineering		Undergrad	enic Architecture, Technique and Design, luate Academic Studies		
						( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
4.	BMI107	Materi	Materials and fabrication technologies in med			(E10) Pow	er, Electronic and Telecommunication		
5.	BMI108	RF and	d microwav	es in medicine			eering, Undergraduate Academic Studies  Biomedical Engineering, Undergraduate Academic s		
6.	EK322	RF and microwave engineering 1					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
7.	EK454	RF and microwave engineering 2					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EM408A	RF and microwave electronics					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	EM420A	Model	ling and sim	nulation of RF and microw	ave circuits		E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
10.	ETI26	RF an	d microwav	e technique		( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
11.	M4001	Funda	mentals of	electronic systems		Ùndergrad	chnical Mechanics and Technical Design, luate Academic Studies		
12.	DE102S	Microv	vave Techn	ique 1		Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
13.	DE500S	Microv	vave Techn	ique 2		Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
14.	EM515	Period	ic Structure	es and Metamaterials		Engineerin	er, Electronic and Telecommunication g, Master Academic Studies		
15.	SI022			om microwave engineerin		Engineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies		
16.	SI034	Applica engine		tamaterials in the microwa	ave	Èngineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies		
17.	ZP508			enance of the Fire Detecti		Académic			
18.	EM518A	Advan circuits		ion techniques of RF and	microwave	Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies		
19.	DE102	Microv	vave Techn	ique 1		Engineerin	ver, Electronic and Telecommunication  g, Doctoral Academic Studies		
20.	DE500	Microv	vave Techn	ique 2	( M40) Technical Mechanics, Doctoral Academic Studies     ( E10) Power, Electronic and Telecommunication     Engineering, Doctoral Academic Studies     ( M40) Technical Mechanics, Doctoral Academic Studies				
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)		1 ( 10) 100	esosnanos, postarar readonno stadios		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative reflerences (minimum 5, not more than 10)								
1.	V. Crnojevic-Bengin, V. Radonic, and B. Jokan Theory and Techniques, Vol. 56, No. 10, pp. 23			esonators, IEEE Transactio	ns of Microwave				
2.	B. Jokanovic, V. Crnojevic-Bengin, O. Boric-Lubecke, Miniature High Selectivity Filters Using Grounded Spiral Resonators, Electronics Letters, Vol. 44, No. 17, 14th August 2008								
3.	V. Radonić, V. Crnojević-Bengin, Super-compa No. 2, pp. 146-147, ISSN: 0013-5194, January		ed on grounded pa	atch resonator, Electronic le	ters, Vol. 46,				
4.	V. Crnojević-Bengin, V. Radonić, B. Jokanovi resonators", MICROWAVE AND OPTICAL TEC	*	•		ig and spiral				
5.	V. Crnojević-Bengin, "Compact 2D Hilbert micr (2006) vol.48, no.2, pp. 270-273	ostrip resonators", MIC	CROWAVE AND	OPTICAL TECHNOLOGY L	ETTERS,				
6.	V. Crnojević-Bengin, Đ. Budimir, "Novel 3-D Hi LETTERS, John Willey, vol. 46, no. 3, pp. 195-		,	VE AND OPTICAL TECHNO	DLOGY				
7.	B. Jokanović, V. Crnojević-Bengin, "Novel left- Technology Letters, John Willey, Vol. 49, No. 1			unded spirals," Microwave a	ind Optical				
8.	V. Radonic, K.Palmer, G. Stojanovic and V.Crr Patterned Ground, International Journal of Anto								
9.	Zemlyakov, Kirill; Crnojevic-Bengin, Vesna, Pla TECHNOLOGY LETTERS 2012 54 (11):2577-		sed on hilbert fra	ctal, MICROWAVE AND OP	TICAL				
10.	V. Radonić, K.D. Palmer and V. Crnojević-Ben- zero-refractive index metamaterials," METAMA				ndgap and				
Sui	Summary data for teacher's scientific or art and professional activity:								
Quo	tation total :	9							
Tota	l of SCI(SSCI) list papers :	4							
Curr	ent projects :	Domestic :	1	International :	3				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last n	ame:			Čelanović L. Nikola				
Academic title:			Associate Professor						
Name of the institution where the teacher works full time and			Faculty of Technical Sciences - Novi Sad						
starti	ng date:				01.12.2008	01.12.2008			
Scier	ntific or art f	ield:		ſ	Power Electronics, Machines and Facilities				
Acad	lemic caries	er	Year	Institution			Field		
Acad	lemic title el	lection:	2012	Faculty of Technical Sci			Power Electronics, Machines and Facilities		
PhD	thesis		2000	Virginia Polytechnic Inst Tennessee			Power Electronics, Machines and Facilities		
Magi	ster thesis		1996	Virginia Polytechnic Inst Tennessee	itute and State	University -	Mechatronics, Robotics and Automation and Intelligent Systems		
Bach	elor's thesis	S	1994	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
List c	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
1.	EE305	Power	Electronics	s 1			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	EE308	Power	Electronics	s 2		(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
3.	EE425	Energy	y Converter	- Control		(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	EE520	Design of Electrical Machines and Converte			ers	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
5.	EOS13	Electric Power Distribution System for Indus			strial Plants	(E01) Pow	ver Engineering - Renewble Sources of Electrical		
6.	EOS16	Software tool is power systems					ver Engineering - Renewble Sources of Electrical andergraduate Professional Studies		
7.	EOS22	Electrical installations of residential building			ıs		ver Engineering - Renewble Sources of Electrical andergraduate Professional Studies		
8.	EOS30	Electri	cal Design	Calculation Software			ver Engineering - Renewble Sources of Electrical andergraduate Professional Studies		
9.	EOS27	Power	electronics	s converters control			01) Power Engineering - Renewble Sources of Electrical ergy, Undergraduate Professional Studies		
10.	DE108S	FACT	s devices a	nd power quality			Power, Electronic and Telecommunication ineering, Specialised Academic Studies		
11.	DE113S	Power	Electronics	s Applications in Power Sy	vstems	Èngineerin	Power, Electronic and Telecommunication ineering, Specialised Academic Studies		
12.	DE309S	Select	ed chapters	s in electrical machines tra	nsients	Èngineerin	rer, Electronic and Telecommunication g, Specialised Academic Studies		
13.	E1SO01	Moder	n technolog	gies in electrical engineerin	ng	Èngineerin	er, Electronic and Telecommunication g, Specialised Professional Studies		
14.	EE520	Desigr	n of Electric	al Machines and Converte	ers	Engineerin (E10) Pow	er, Electronic and Telecommunication g, Master Academic Studies er, Electronic and Telecommunication g, Undergraduate Academic Studies		
15.	EE545	Power Netwo		s with Distribution and Tra	nsmission	(E10) Pow	er, Electronic and Telecommunication g, Master Academic Studies		
16.	ZCM11	Moder	n software	tools for clean energy tech	nnologies	( ZC0) Clea	an Energy Technologies, Master Academic		
17.	DE309	Select Machi		s in Transient Phenomena	in Electrical		ver, Electronic and Telecommunication g, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					
1.				Katić, "Permanent Magnet tronics, vol. 23, no. 3, pp.			ascade for Wind Turbine Application," IEEE		
2.	M. Vekić, of Compl	S. Gral	oić, D. Majs	storović, I. Celanović, N. C	elanović, V. Ka	atić, "Ultra Lo	ow Latency HIL Platform for Rapid Development s, USA, ISSN 0885-8993,[Online]. Available:		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

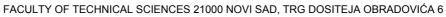


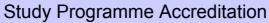
**F** 100

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering

Re	Representative refferences (minimum 5, not more than 10)								
3.	N. Celanović, I. Celanović, Z. Ivanović: Cyber Physical Systems: A New Approach to Power Electronics Simulation, Control and Testing, Advances in Electrical and Computer Engineering, Faculty of electrical engineering and computer sciences, University of Suceava, Romania, vol.12, Issue 1, pp. 33-38, Feb. 2012.								
4.	D. Majstorović, I. Celanović, N. Teslić, N. Čelanović, V. A. Katić, "Ultra-Low Latency Hardware-in-the-Loop Platform for Rapid Validation of Power Electronics Designs", IEEE Transactions on Industrial Electronics, USA, ISSN: 0278-0046, Vol. 58, No.10, pp.4708-4716, Oct.2011.								
5.	Z. Ivanović, E. Adzić, M. Vekić, S. Grabić, N. Celanović, V. Katić, "HIL Evaluation of Power Flow Control Strategies for Energy Storage Connected to Smart Grid Under Unbalanced Conditions", IEEE Transaction on Power Electronics, USA, ISSN 0885-8993, Available: 10.1109/TPEL.2012.2184772								
6.	N. Čelanović, D. Boroyevic, "A fast space-vector modulation algorithm for multilevel three-phase converters", IEEE Transactioncs on Industry Applications, vol. 37, no. 2, March/April 2001.								
7.	N. Čelanovic, D. Boroyevich, "A comprehensive sudy of neutral-point balancing problem in three-level neutral-point-clamped voltage source PWM inverters", IEEE Transactions on Power Electronics, vo. 5, no. 2, March 2000.								
8.	M. Goldfarb, N. Čelanović, "A flexure-based gri March 1999, pp. 181-187.	ipper for small-scale n	nanipulation", Rob	ootica, Cambridge Unive	ersity Press, vol. 17,				
9.	M. Goldfarb, N. Čelanović, "A Lumped-Parame actuators" ASME Journal of Dynamic Systems			0					
10.	M. Goldfarb, N. Čelanović, "Modeling piezoelec magazine, vol. 17, no. 3, 1997, pp. 67-79.	ctric stack actuators fo	or control of micro	manipulation", IEEE Cor	ntrol systems				
Su	mmary data for teacher's scientific or art and profe	essional activity:							
Quo	tation total :	17							
Tota	l of SCI(SSCI) list papers :	5							
Curr	ent projects:	Domestic :	0	International :	2				







Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:				Čongradac D. Velimir			
<b>—</b>	lemic title:				Assistant Professor			
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				15.06.1998			
Scier	ntific or art f	ield:			Automatic Co	ontrol and Sy	ystem Engineering	
	lemic carie		Year	Institution			Field	
-	lemic title e	lection:	2009	Faculty of Technical Sci			Automatic Control and System Engineering	
PhD	thesis		2009	Faculty of Technical Sci			Automatic Control and System Engineering	
$\vdash$	ster thesis		2000	Faculty of Technical Sci			Automatic Control and System Engineering	
	elor's thesi		1998	Faculty of Technical Sci			Automatic Control and System Engineering	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	idy programme	es I		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	AU43	Funda	mentals of	Biomedical Engineering		Studies	medical Engineering, Undergraduate Academic	
						Academic		
2.	AU50	Proces	ss Control b	by Computer		Academic		
	,			- •		Undergrad	asurement and Control Engineering, uate Academic Studies	
3.	GI005	Intelligent Control Systems				( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
4.	Z410A	Geospatial technologies and systems				(Z20) Envi	ronmental Engineering, Undergraduate Academic	
5.	Z410	Geoinformacione tehnologije i sistemi(uneti naz engleskom)			naziv na	(Z20) Envi	ronmental Engineering, Undergraduate Academic	
6.	BMI112	Biomedical engineering in sport physiology				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
7.	BMI113	Neuro	engineering	J		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
8.	BMI120	Equipr disable		stems for helping the elde	erly, ill and	( BM0) Biomedical Engineering, Undergraduate Academic Studies		
9.	BMI124	Syster	n Modeling	and Simulation		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
10.	BMI125	Biolog	ical Control	Systems		( BM0) Biomedical Engineering, Undergraduate Academic Studies		
11.	E2311	Autom	ation in sm	art office-residential buildi	ngs	( E20) Computing and Control Engineering, Undergraduate Academic Studies		
12.	EMSAU 1	Autom	atic Contro	Systems in Electronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
13.	SEAU01	Nonlin	ear prograr	nming and evolutionary co	mputations		tware Engineering and Information Technologies, luate Academic Studies	
14.	SEAU03	Real-ti	ime control	algorithms			tware Engineering and Information Technologies, luate Academic Studies	
15.	SEAU04	Softwa	are of BMS				tware Engineering and Information Technologies, luate Academic Studies	
15.	0LA004	COILWA	ALC OI DIVIO				tware Engineering and Information Technologies - Indergraduate Academic Studies	
16.	SEAU06	Softwo	are of Proce	ess Computers			tware Engineering and Information Technologies, luate Academic Studies	
10.	SLAUUO	SUILWA	are or Froce	saa Computera			tware Engineering and Information Technologies - Indergraduate Academic Studies	
17.	ZC037	Autom	ation applie	ed in the industry and build	lings	( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
18.	AU514	Totally	/ Integrated	Automatic Control Systen	ns	( E20) Computing and Control Engineering, Master Academic Studies		

## A STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	of courses b	eing held by the teacher in the accred	lited study programme	es				
	ID	Course name		Study programi	me name, study type			
19.	S054	Computer Modelling and Simulation		( S01) Postal Traffic and Telecommunications, Master Academic Studies				
20.	SEAM01	Intelligent Control Systems		( SE0) Software Engineering and Information Technologies, Master Academic Studies				
21.	SEAM02	EAM02 Adaptive and advanced control (SE0) Software Engineering and Information Technologies, Master Academic Studies						
22.	SEAM03	SEAM03 Software Algorithms in Supervisory Control and Data Acquisition Systems (SE0) Software Engineering and Information Technologies, Master Academic Studies						
23.	SEAM05	Dynamic Programming, combinatori optimization	al and network	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
24.	DAU017	Selected Topics from Totally Integra Control Systems	ted Automatic	( E20) Computing and Control Engineering, Doctoral Academic Studies				
25.	DAU018 Selected Chapters in Distributed Control Systems (E20) Computing and Control Engineering, Doctoral Academic Studies							
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
1.		ac V., Kulić F.: Recognition of the imp n, Energy and Buildings, 2012, Vol. 47			ks and genetic algorithms to	optimize chiller		
2.	Čongrada Buildings	ac V., Jorgovanović N., Stanišić D.: A , 2012, Vol. 48, pp. 146-154, ISSN 03	ssessing the energy c 78-7788	onsumption for he	eating and cooling in hospita	ls, Energy and		
3.		ac V., Bojanić D., Čapko D.: Algorithr and fuzzy logic, Solar Energy, 2012,				a genetic		
4.		ac V., Kulić F.: HVAC system optimiz , 2009, ISSN 0378-7788	ation with CO2 concer	ntration control us	ing genetic algorithms, Ener	gy and		
5.		ac V.: Control of the lighting system u 36, UDK: 621	sing a genetic algorith	m, Thermal Scier	nce, 2012, Vol. 16, No 1, pp.	237-250, ISSN		
6.		ac V.: Business process managemen 2012, Vol. 16, No 1, pp. 269-279, ISS			ment by using the totalobser	ver, Thermal		
Sur	nmary data	for teacher's scientific or art and profe	essional activity:					
Quot	ation total:		0					
		CI) list papers :	6	<del>.</del>				
Curre	Current projects : Domestic : 1 International : 0							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:				Damnjanović S. Mirjana			
	lemic title:				Associate Pro			
Nam	e of the inst	itution v	vhere the te	eacher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				01.09.1994			
Scie	ntific or art f	ield:			Electronics			
Acad	lemic caries	er	Year	Institution		Field		
Acad	Academic title election: 2011						Electronics	
PhD	thesis		2006	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
⊢–	ster thesis		2002	Faculty of Technical Sci			Electronics	
	elor's thesis		1994	Faculty of Technical Sci			Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	H206	Introdu	uction to Ele	ectronics		( H00) Med	chatronics, Undergraduate Academic Studies	
2.	H209	Digital	Electronics	3		( H00) Med	chatronics, Undergraduate Academic Studies	
3.	ВМІ99	Electro	onics			( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
4.	E138A	Digital	Electronics	3			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EM407A	Comp	uter aided o	lesign of digital integrated	circuits		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	DE302S	Desigr Protec		acterization of Component	s for EMI	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
7.	DE502S	2S Micro-sensors and MEMS					ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	EM423	23 EMI and EMC in Electronics					er, Electronic and Telecommunication g, Master Academic Studies	
9.	BMIM1B	B EMI and EMC in medicine equipment				(BM0)Bio	medical Engineering, Master Academic Studies	
10.	DE402S	Chosen areas of analogue, digital and RF integrated circuits design			ntegrated		ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EM510A	Advan circuits		ter aided design of microe	electronic		er, Electronic and Telecommunication g, Master Academic Studies	
12.	DE302	Desigr Protec		acterization of Component	s for EMI	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
13.	DE502	Micro-	sensors an	d MEMS		( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
14.	DE402		n areas of a design	analogue, digital and RF i	ntegrated	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Varistor I	nductor	Integrated				nica V., Živanov Lj.: Characterization of Novel 004, Vol. 25, No 12, pp. 778-780, ISSN 0741-	
2.	Fixture, I	EEE Tra		on Magnetics, 2011, Vol.			pe LC EMI Chip Filters Using New Microstrip Test ISSN 0018-9464, UDK:	
3.		y Shift o					ive Layer Geometry on Maximal Impedance etics, 2010, Vol. 46, No 6, pp. 1303-1306, ISSN	
4.							II Suppressors for PCB Applications Using p. 1370-1373, ISSN 0018-9464	
5.	Stojanović G., Damnjanović M., Živanov Lj.: Temperature depende							
6.	Dompionović M. Živopov Li. Noči L. Durić S. Dibordžić D.: A Novel Approach to Extending the Linearity Dange of Displacement					123-4126, ISSN 0018-9464		
7.	and mear	nder ind	uctors emb		Journal of Mag		v P., Mcloughlin N.: High performance zig-zag Magnetic Materials, 2006, Vol. 297, No 2, pp. 76-	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10) Damnjanović M., Stojanović G., Desnica V., Živanov Lj., Ramesh R., Pat B., Neil M.: Analysis, design and characterization of

ferrite EMI suppressors, IEEE Transactions on Magnetics, 2006, Vol. 42, No 2, pp. 270-277, ISSN 0018-9464, UDK: 10.1109/TMAG.2005.860485

Damnjanović M., Živanov Lj., Đurić S., Marić A., Menićanin A., Radosavljević G., Blaž N.: Characterization and modelling of 9. miniature ferrite transformer for high frequency applications, Microelectronics International, 2012, Vol. 29, No 2, pp. 83-89, ISSN 1356-5362

10.	Đurić S., Nađ L., Damnjanović M., Đurić N., Živanov Lj.: A novel application of planar-type meander sensors, Microelectronics International, 2011, Vol. 28, No 1, pp. 41-49, ISSN 1356-5362								
Sur	Summary data for teacher's scientific or art and professional activity:								
Quot	ation total:	77							
Tota	of SCI(SSCI) list papers :	15							
Curre	Current projects : Domestic : 2 International : 2								

Strana 221 Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

F				•	I =			
	e and last n	ame:			Dautović B. S			
	emic title:				Assistant Pro		nasa Nasi Oad	
	e of the inst ng date:	itution v	vhere the te	eacher works full time and		cnnical Scie	nces - Novi Sad	
	ntific or art f	iold:			01.01.1993	loctrotochni	00	
	emic caries		Year	Institution	Theoretical Electrotechnic		Field	
				onoco Novi S	od	Theoretical Electrotechnics		
	thesis	ection.	2010	Faculty of Technical Sci				
			1997	Faculty of Technical Sci Faculty of Sciences - No		au	Theoretical Electrotechnics  Mathematics	
Ŭ	ster thesis elor's thesis		1997	Faculty of Technical Sci		od	Theoretical Electrotechnics	
							Theoretical Electrotechnics	
LIST	l courses b	ellig ne	id by the te	acher in the accredited stu	udy programme	;s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E128F	Electri	cal Circuit 7	Theory		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	E128A	Electri	cal Circuit	Гһеогу		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EM408A	RF and	d microwav	e electronics		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EM420A	Modell	ling and sin	nulation of RF and microw	ave circuits		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EM458	System Level Design				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
6.	DE200S	Algorithms and Complexity-an Advanced Course			ourse		ver, Electronic and Telecommunication g, Specialised Academic Studies	
7.	DE300S	Randomised Approximation Algorithms					ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	DE516S	Algoritmi za multiprocesorske sisteme					ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	EM503	Algorit	hm Heurist	ics			er, Electronic and Telecommunication g, Master Academic Studies	
10.	BMIM1C	Bioinfo	ormatics Alg	gorithms		( BM0) Bio	medical Engineering, Master Academic Studies	
11.	EM405A	Forma	lne metode	projektovanja i verifikacij	e hardvera	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
12.	EM415A	Algorit	hms for VL	SI Physical Design Autom	ation	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
13.	EM518A	Advan circuits		tion techniques of RF and	microwave	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
14.	DE200	Algorit	hms and C	omplexity-an Advanced C	ourse	, ,	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
15.	DE300	Rando	mised App	roximation Algorithms		, ,	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
16.	DE516	Algorit	mi za multi	procesorske sisteme			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.				A Comment on "Boolean F 8, (2006), 1067-1069.	unctions Class	sification via	Fixed Polarity Reed-Muller Form". IEEE Trans.	
2.	SEŠIĆ,A	, DAUT	OVIĆ,S., M	IALBAŠA,V., Dynamic Po			em with a Two-Priority Request Queue Using Integrated Circuits and Systems, 27(2). Feb	
3.	Tosic,M., Cirilovic,M., Ikovic,O., Kesler,D., Dautovic,S. Boscovic,D., Impact of Different Content Placement and Delivery							
4.				narik R.: Design and Verit stems and Informatics, Su			configurable Architecture, 10. SISY - International 2012	
5.				/ukobratović B.: Boolean ronics – Ee, Novi Sad, 26-			Memristive Logic Circuits, 16. International 78-86-7892-355-5	

## ASTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)									
6.	Struharik R., Vranjković V., Teodorović P., Dau Symposium on Power Electronics – Ee, Novi S				International					
7.	Bošković D., Faramak V., Tošić M., Dautović S.: Pervasive wireless CDN for greening video streaming to mobile devices, 34. MIPRO - International convention on information and communication technology, electronics and microelectronics - Savjetovanje o mikroračunalima u telekomunikacijama, Opatija, 23-27 Maj, 2011									
8.	Vukobratović B., Dautović S.: Probabilistic Model Checking of Resistive Electrical Circuits, 16. Telekomunikacioni forum TELFOR, Beograd, 25-27 Novembar, 2008									
9.	DAUTOVIĆ,S., NOVAK,L., Evolutionary Design of Combinational Circuits using Boolean Function Signatures. WSEAS Trans. on Circuits and Systems, Issue 11, Volume 5, (2006), 1677-1681.									
10.	Dautović S., Acketa D., Mudrinski V.: Non-isor Univ.Beograd.Publ.Elektrotehn.Fak., Univ.Beograd.Publ.Elektrotehn.Fak.									
Sur	mmary data for teacher's scientific or art and profe	essional activity:								
Quot	tation total :	10								
Tota	l of SCI(SSCI) list papers :	2								
Curr	ent projects :	Domestic :	1	International :	2					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	lame and last name:				Delić D. Vlado			
Acad	lemic title:				Associate Pro	ofessor		
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
starti	ng date:				01.09.1989			
Scie	ntific or art f	ield:			Telecommuni	cations and	Signal Processing	
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2008	Faculty of Technical Sci	ences - Novi Sa	nces - Novi Sad Telecommunications and Signal Proce		
PhD	thesis		1997	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
Magi	ster thesis		1993	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing	
Bach	elor's thesi	S	1989	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es		
ID Course name				Study pro	gramme name, study type			
1.	EK411	Digital	Filters				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	Z413A	Acous	tics and No	ise Protection		(Z20) Envii Studies	ronmental Engineering, Undergraduate Academic	
3.	BM118B	Acous	tics and Au	dio Engineering in Medicir	ne	( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
4.	EK312	Acous	tics and Au	dio Engineering			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EK312L	Acous	tics and Au	dio Engineering in Multime	edia	( F10) Eng Studies	ineering Animation, Undergraduate Academic	
6.	EK422	Digital	Audio Sign	al Processing		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	EK451	Audio and Video Technologies				er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EK452	Monitoring and Noise Protection				er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	ETI27	Audio Engineering			(E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
10.	ETI29	Monito	oring and No	oise Protection		(E02) Elec Profession	stronics and Telecommunications, Undergraduate al Studies	
11.	ETI35	Digital	Sound Pro	cessing		(E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies	
12.	DE111S	Algorit	hms for Dig	ital Signal Processing			ver, Electronic and Telecommunication g, Specialised Academic Studies	
13.	DE212S	Select	ed Chapters	s in Acoustics and Audio I	Engineering	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
14.	DE512S	Humar	n-Machine S	Speech Communication			ver, Electronic and Telecommunication g, Specialised Academic Studies	
15.	S0151	Applica Teleco	ation of Digi ommunication	ital Signal Processing in ons		( S01) Pos Academic	tal Traffic and Telecommunications, Master Studies	
16.	SI037	Teleco	mmunicatio	on Infrastructure of E-Busi	ness		ver, Electronic and Telecommunication g, Specialised Professional Studies	
17.	BMIM2A	Assisti	ve Informat	ion and Communications	Technologies	(BM0) Bio	medical Engineering, Master Academic Studies	
18.	EK422L	Digital	Audio Sign	al Processing		( F20) Eng	ineering Animation, Master Academic Studies	
19.	EK550	Speec	h Technolo	gies			er, Electronic and Telecommunication g, Master Academic Studies	
20.	S1596	Acous	tics and Au	dio Engineering in Traffic		( S01) Pos Academic	tal Traffic and Telecommunications, Master Studies	
21.	DE111	Algorit	hms for Dig	ital Signal Processing		Engineerin ( H00) Med ( OM1) Ma	ver, Electronic and Telecommunication g, Doctoral Academic Studies chatronics, Doctoral Academic Studies thematics in Engineering, Doctoral Academic	
22.	DE212	Select	ed Chapters	s in Acoustics and Audio I	Engineering		ver, Electronic and Telecommunication g, Doctoral Academic Studies	

## TE SOURCE STORY

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes										
	ID	Course name		Study programi	me name, study type						
23.	DE512	Human-Machine Speech Communic	eation		ectronic and Telecommunicatoral Academic Studies	ation					
Rep	Representative refferences (minimum 5, not more than 10)										
1.	. "Zbirka zadataka iz digitalnih telekomunikacija", V. Milošević, V. Delić, FTN&Stylos, 1996, p.189 i FTN, 2005, p.282										
2.	"Zbirka z	adataka iz digitalne obrade signala", \	/. Delić, M. Sečujski, I.	Radić, FTN, 200	7, str. 176, (ISBN 978-86-78	92-082-0)					
3.	"Postupak za smanjenje verovatnoće greške kod produženog telefonskog biranja niza cifara", V. Delić, V. Šenk; Patent u Srbiji 48734 (P-434/97), 2009										
4.	"Govorni portal za slepe i slabovide osobe - KONTAKT", V. Delić u grupi autora, Jedinstven proizvod u regionu baziran na dijalogu čovek-mašina, rezultat inovacionog projekta kod Ministarstva nauke (PTR-2078) 2005/2006										
5.	"Speech Signal Processing in ASR&TTS Algorithms", V. Delić, D. Pekar, R. Obradović, M. Sečujski, Facta Universitatis (Niš), Series: Electronics and Energetics, vol. 16, no. 3, (2003), pp. 355-364										
6.	"A Review of R&D of Speech Technologies in Serbian and their Applications in Western Balcan Countries", V. Delić, pp. 64-83, Keynote lecture at XII international conference "Speech and Computer" (SPECOM), Moskva, 15-18.10.2007.										
7.	Gnjatović	nation Capability of Prosodic and Spe c, M. Sečujski, S.T. Jovičić; Electronic d, DOI:10.5755/j01.eee.18.9.2806									
8.	Perić, M.	e of the Number of Principal Compone Gnjatović, V. Delić; Electronics and E 755/j01.eee.123.7.2379									
9.	Applied I	ree: Modeling Attentional Information ntelligence, Springer-Verlag New Yorl s10489-011-0329-5									
10.	"A Novel Split-and-Merge Algorithm for Hierarchical Clustering of Gaussian Mixture Models", B. Popović, M. Janev, D. Pekar, N. Jakovljević, M. Gnjatović, M. Sečujski, V. Delić; Applied Intelligence, Springer-Verlag N. York, Inc., ISSN 0924-669X, Volume 37, Number 3, Page 377-389, (2012) DOI: 10.1007/s10489-011-0333-9										
		for teacher's scientific or art and profe									
	ation total :		52								
	•	CI) list papers :	14	4	International :	Ιο					
Curre	urrent projects : Domestic : 4 International : 0										

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:				Doroslovački D. Rade			
<b>—</b>	lemic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				01.10.1978			
	ntific or art f				Mathematics			
Acad	lemic caries	er	Year	Institution		Field		
Acad	lemic title e	lection:	2000	Faculty of Technical Sci	ences - Novi S	ad	Mathematics	
PhD	thesis		1989	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
⊢–	ster thesis		1984	Faculty of Sciences - No			Mathematical Sciences	
	elor's thesi		1976	Faculty of Sciences - No			Mathematical Sciences	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
						Academic		
1.	E213	Discre	te Mathema	atics and Linear Algebra		Ùndergrad	asurement and Control Engineering, uate Academic Studies	
				v		Ùndergrad	tware Engineering and Information Technologies, uate Academic Studies	
						Loznića, U	tware Engineering and Information Technologies - ndergraduate Academic Studies	
2.	E101	Discre	te Mathema	atics		( ES0) Power Software Engineering, Undergraduate Academic Studies		
3.	E101A	Discrete Mathematics				Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	IM1523	Discre	te Mathema	atics		( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
		Discrete Mathematics				(I20) Engin Studies	neering Management, Undergraduate Academic	
5.	IM1706	Actuerial Mathematics				(I20) Engin Studies	neering Management, Undergraduate Academic	
6.	SE0009	Discre	te Mathema	atics		Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
						( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
7.	0M503	Combi	natorics an	d Graph Theory		Studies	thematics in Engineering, Master Academic	
8.	0M509	Applie	d Abstract A	Algebra		Studies	thematics in Engineering, Master Academic	
9.	0M511	Geom	etry			( OM1) Mathematics in Engineering, Master Academic Studies		
10.	0ML503	Combi	natorics an	d Graph Theory		( OM1) Ma Studies	thematics in Engineering, Master Academic	
11.	0ML509	Applai	d Abstract A	Algebra		Studies	thematics in Engineering, Master Academic	
12.	0ML511	Geom	etry			Studies	thematics in Engineering, Master Academic	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
13.	DZ01MS	Select	ed Chapters	s in Mathematics		( I22) Engii Studies	neering Management, Specialised Academic	
						( Z00) Envi	ironmental Engineering, Specialised Academic	
14.	OM519	Actuer	ial Mathem	atics		( OM1) Ma Studies	thematics in Engineering, Master Academic	
15.	OML519	Actuer	ial Mathem	atics		( OM1) Mathematics in Engineering, Master Academic Studies		

## ASSTUDIOS STUDIOS STUD

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	of courses b	peing held by the teacher in the accred	dited study programme	S		
	ID	Course name		Study programi	me name, study type	
16.	D0M08	Applied Abstract Algebra		( OM1) Mathema Studies	atics in Engineering, Doctora	Il Academic
17.	D0M17	Combinatorics		( OM1) Mathema Studies	atics in Engineering, Doctora	Il Academic
18.	D0M20	Graph Theory		( OM1) Mathematics in Engineering, Doctoral Academic Studies		
19.	D0M34	Actuarial Mathematics		( OM1) Mathema Studies	atics in Engineering, Doctora	Il Academic
20.	DOM31	Combinatorial Matrix Theory	( OM1) Mathema Studies	atics in Engineering, Doctora	Il Academic	
					ectronic and Telecommunica ctoral Academic Studies	ation
				( E20) Computin Academic Studie	g and Control Engineering, I es	Doctoral
				( F00) Graphic E Studies	ngineering and Design, Doc	toral Academic
				(F20) Engineerii	ng Animation, Doctoral Acad	lemic Studies
	DZ01M			(G00) Civil Engi	neering, Doctoral Academic	Studies
				( GI0) Geodesy and Geomatics, Doctoral Academic Stud		
21.		DZ01M Selected Chapters in Mathematics (H00) Mechatronics, Doctoral Academic Studies				dies
		Constant Chapters in manifestation		( I20) Industrial E Doctoral Acaden	Engineering / Engineering Ma nic Studies	anagement,
				( M00) Mechanic	al Engineering, Doctoral Ac	ademic Studies
				( M40) Technical	Mechanics, Doctoral Acade	emic Studies
				( OM1) Mathema Studies	atics in Engineering, Doctora	Il Academic
				( S00) Traffic En	gineering, Doctoral Academ	ic Studies
				( Z00) Environme Studies	ental Engineering, Doctoral	Academic
				( Z01) Safety at	Work, Doctoral Academic St	udies
Rep	oresentative	e refferences (minimum 5, not more th	an 10)			
1.	R. Doros	lovački, R. Tošić and I. Stojmenović: (	Generating and countir	ng triangular syste	em, BIT: 27(1987) 18-24, Ko	benhavn, R 54
2.		lovački , R . Tošić i J. Gutman: Topol atical chemistry (19) (219-228) Max- P				e, Match in
3.		roslovački: Binary Sequences without				994), 93-98.
4.		roslovački: On binary n-words with for			-	
5.		lovački, J. Pantović, G.Vojvodić: Note		•		Mathematics.
6.	R. Doros	lovački, J. Pantović, G. Vojvodić: Clas plement, Matematički vesnik,, Mather	sification of Maps by t	neir Membership	in Maximal Clones that conta	
7.	Rade Do	roslovački, Jovanka Pantović and Gra atical Journal, 55 (130),2005, 719-72	dimir Vojvodić: One In			zechoslovaka
8.	O. Bodro	ža-Pantić, R. Doroslovački, K. Doroslo N OF A REGION INTO TWO," in Rock	ovački, AN ELEMENTA			G THE
9.	O. Bodro	ža-Pantić, R. Doroslovački, The Gutm o.2, Februar 2004, R 51.	-			Chemistrz
10.	Ratko To	šić, Gradimir Vojvodić, Dragan Mašul Valued Logic, An International Journal				
Sur		for teacher's scientific or art and profe	<u> </u>	<u> </u>	1 3// ( 2 2 2 // 2 2 2	
	ation total :	<u> </u>	60			
Total	of SCI(SS	CI) list papers :	5			
Current projects : Domestic : 0 International : 0						0



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	lame and last name:				Đurić M. Nikola			
Acad	lemic title:				Assistant Pro	fessor		
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
starti	ng date:				01.10.1997			
Scie	ntific or art f	ield:			Theoretical E	lectrotechni	cs	
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	ection:	2010	Faculty of Technical Sci	ences - Novi Sa	Sad Theoretical Electrotechnics		
PhD	thesis		2009	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical and Computer Engineering	
Magi	Magister thesis 2003 Faculty of Technical Science			ences - Novi Sa	ad	Electrical and Computer Engineering		
Bach	Bachelor's thesis 1997 Faculty of Technical Science			ences - Novi Sa	ad	Electrical and Computer Engineering		
List	of courses b	eing hel	ld by the tea	acher in the accredited stu	udy programme	s		
ID Course name				Study pro	gramme name, study type			
1.	E216	6 Fundamentals of Electrical Engineering				Àcadémic	ver Software Engineering, Undergraduate	
2.	EE300	Electro	magnetics			(E10) Pow	er, Electronic and Telecommunication	
3.	H104	Funda	mentals of I	Electrical Engineering 1		_	g, Undergraduate Academic Studies chatronics, Undergraduate Academic Studies	
4.	H104 H108			Electrical Engineering 1 Electrical Engineering 2			chatronics, Undergraduate Academic Studies	
7.	11100	Tunda	mentais or i	Liectrical Engineering 2		( M20) Med	chanization and Construction Engineering, uate Academic Studies	
	M112				( M30) Ene	ergy and Process Engineering, Undergraduate Studies		
_		Electrical Engineering and Electric Machine			0		chnical Mechanics and Technical Design, uate Academic Studies	
5.	IVITIZ	Electric	cai Enginee	ering and Electric Machine	5	( P00) Prod Studies	duction Engineering, Undergraduate Academic	
						( S00) Traf Academic	fic and Transport Engineering, Undergraduate Studies	
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies		
6.	E105	Funda	mentals of I	Electrical Engineering 1		Engineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Undergrad	asurement and Control Engineering, uate Academic Studies	
7.	E110	Funda	mentals of I	Electrical Engineering 2		Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Undergrad	asurement and Control Engineering, uate Academic Studies	
8.	BMI94	Funda	mentals of I	Electrical Engineering		Studies	medical Engineering, Undergraduate Academic	
9.	DE416S	Investi	gation of el	ectromagnetic fields		Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	DE517S	Techno	ology of ma	gnetic and optical data sto	orage	Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EE543	Electro	Magnetic I	Energy		Engineerin	er, Electronic and Telecommunication g, Master Academic Studies	
12.	E1IEP	Investi	gation of el	ectromagnetic fields		Àcademic		
							er, Electronic and Telecommunication g, Master Academic Studies	
13.	H799	Fieldbu	uses and pr	rotocols			chatronics, Master Academic Studies	
4.4	11045	NA-4!-	oont!			( H00) Med	chatronics, Master Academic Studies	
14.	H845	iviotion	control			( I10) Indus	strial Engineering, Master Academic Studies	
15.	DE416	Investi	gation of el	ectromagnetic fields			ver, Electronic and Telecommunication g, Doctoral Academic Studies	

# AL TOPOST ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programi	me name, study type					
16.	DE517	Technology of magnetic and optical	data storage		lectronic and Telecommunic ctoral Academic Studies	ation				
Rep	Representative refferences (minimum 5, not more than 10)									
1.	Durić N., Despotović M.: Application of MTR soft-decision decoding in multiple-head magnetic recording systems, Sadhana - Academy Proceedings in Engineering Science, 2009, Vol. 34, Broj 3, str. 381-392, ISSN 0256-2499									
2.	Đurić S., Nađ L., Damnjanović M., Đurić N., Živanov Lj.: A novel application of planar-type meander sensors, Microelectronics International, 2011, Vol. 28, No 1, pp. 41-49, ISSN 1356-5362									
3.	Đurić N., Kavecan N.: Internet Portal of the SEMONT Information Network for the EM Field Monitoring, 4. International Conference on Advances in Future Internet - AFIN, Rim, 19-24 Avgust, 2012, pp. 55-59, ISBN 978-1-61208-211-0 (Best paper award)									
4.	Đurić N., Kavečan N., Kljajić D.: The EM Field Register of the SEMONT Broadband Monitoring Network, 10. SISY - International Symposium on Intelligent systems and Informatics, Subotica, 20-22 Septembar, 2012, pp. 27-30, ISBN 978-1-4673-4748-8									
5.	Durić N., Šenk V.: The MAP Implementation in Logic Circuits for Soft-decision Decoding of MTR Codes, 6. European Modeling Symposium - EMS, Malta, 14-16 Novembar, 2012, pp. 201-206, ISBN 978-0-7695-4926-2/12									
6.		Prša M., Kasaš-Lažetić K.: Informaticing Sciences - IJES, 2011, Vol. 1, No			etic Fields Monitoring, Intern	ational Journal				
7.		ović B., Đurić N.: Monitoring of EMF v agnetics and bioeffects of electromagn								
8.		'., Đurić N., Herceg D.: Serbian Laws 10. International Conference on Appl								
9.	10. Interr	Prša M., Kasaš-Lažetić K., Bajović V. national Conference on Telecommunio 2011, pp. 701-704, ISBN 978-1-4577	cations in Modern Sate							
10.	Durić N., Šenk V., Vasić B.: MAP Decoding of MTR Codes in Multiple-Head Magnetic Recording Systems, 10. International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services - TELSIKS, Niš, 5-8 Oktobar, 2011, pp. 164-167. ISBN 978-1-4577-2018-5									
Sur	nmary data	for teacher's scientific or art and profe	essional activity:	_						
Quot	ation total:		0							
Total	of SCI(SS	CI) list papers :	2							
Curre	Current projects : Domestic : 3 International : 2									

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Erdeljan M. Aleksandar				
Academic title:			Associate Professor				
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad
starting date:			24.07.1989				
Scientific or art field:			Automatic Co	ntrol and Sy	ystem Engineering		
Acad	demic caries	er	Year	Institution			Field
Acad	demic title e	lection:	2011				Automatic Control and System Engineering
PhD	thesis		2000	Faculty of Technical Sci	ences - Novi Sa	ad	Automatic Control and System Engineering
Magi	ister thesis		1993	School of Electrical Engi	ineering - Beog	ırad	Automatic Control and System Engineering
Bach	nelor's thesis	S	1989	Faculty of Technical Sci	ences - Novi Sa	ad	Automatic Control and System Engineering
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s	
	ID	Course	e name			Study pro	ogramme name, study type
1.	E126	Syster	n Control, N	Modeling and Simulation			er, Electronic and Telecommunication g, Undergraduate Academic Studies
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies
						( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies
	F222	System Modeling and Simulation					chnical Mechanics and Technical Design, luate Academic Studies
2.	E232						asurement and Control Engineering, luate Academic Studies
						( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies	
							tware Engineering and Information Technologies - Indergraduate Academic Studies
3.	GI303A	Distrib	uted Syster	ns in Geomatics		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic
4.	H213	Syster	n Modelling	and Simulation 1		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic
						( H00) Med	chatronics, Undergraduate Academic Studies
5.	BMI124	Syster	n Modeling	and Simulation		( BM0) Bio Studies	medical Engineering, Undergraduate Academic
6.	E2312	Softwa	aro dosign f	or SCADA systems		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies
0.	LZJIZ	Soliwa	are design n	or ocaba systems			tware Engineering and Information Technologies - indergraduate Academic Studies
7.	ESI001	Softwa	are Tools in	Power Engineering		Academic	
8.	ESI010	Basics	of control i	n power systems		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies
J.	23,010	240100	. 5. 55111011	porror oyotomo		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies
9.	ESI015	Distrib	uted Comp	uter Systems in Power Sy	stems	Àcadémic	
10.	SEAU02	SCAD	A Software			Undergrad	tware Engineering and Information Technologies, uate Academic Studies
11.	SEAU09	Softwa	are design c	of SCADA systems		( SE0) Software Engineering and Information Technolog Undergraduate Academic Studies	
	02,1000	CONTRACT	5 4551911 6	contentojotomo		Loznića, U	tware Engineering and Information Technologies - ndergraduate Academic Studies
12.	SEI002	Architecture of Distributed Systems in Pov			er Systems	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies

# ASSITUDIO S

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes							
	ID	Course name		Study programme name, study type				
				( E20) Computing and Control Engineering, Master Academic Studies ( MR0) Measurement and Control Engineering, Master				
13.	AU502	Distributed Control Systems		Academic Studies				
				(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
14.	H301	System Modeling and Symulation		( H00) Mechatronics, Master Academic Studies				
15.	S054	Computer Modelling and Simulation		( S01) Postal Traffic and Telecommunications, Master Academic Studies				
16.	BMIM3D	Development of integrated biomedic	al systems	( BM0) Biomedical Engineering, Master Academic Studies				
17.	E2532	Automatic Control Systems Project I	Management	( E20) Computing and Control Engineering, Master Academic Studies				
18.	E2533	Discrete event simulation		( E20) Computing and Control Engineering, Master Academic Studies				
19.	E2535	Software Algorithms in Supervisory	Control and Data	( E20) Computing and Control Engineering, Master Academic Studies				
13.	LZJJJ	Acquisition Systems		(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
20.	ESI030	Distributed Software Architectures for Grids	or Smart Energy	( ES0) Power Software Engineering, Master Academic Studies				
21.	SEAM06	Integration of Distributed Control Sys	stems	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
22.	DAU006	Selected Chapters in Modeling and Dynamic Systems	Simulation of	( E20) Computing and Control Engineering, Doctoral Academic Studies				
23.	DAU018	Selected Chapters in Distributed Co	ntrol Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies				
24.	ZRD25A	Selected chapters from Artificial Inge	eligence	( Z01) Safety at Work, Doctoral Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
1.		., Erdeljan A., Popović D.: Algorithm f pl. 61, No. 3, 715-721 (2011). ISSN 0		gies in the Common Information Model (CIM), Computers				
2.		cal neural network, International Journ		tion of workflow scheduling in Utility Management System with ntelligence Systems, 2011, Vol. 4, No 4, pp. 672-679, ISSN				
3.		., Erdeljan A., Švenda G., Popović M., Electronics and electrical engineering		ing of Large Data Model in Distribution Management b. 83-88, ISSN 1392-1215				
4.		ıkmirović S., Erdeljan A., Kulić F.: Hy 2012, Vol. 16, No S, pp. 215-224, ISS		etwork System for Short-Term Load Forecasting, Thermal				
5.		rić S., Erdeljan A., Čapko D., Lendak engineering, 2011, Vol. 107, No 1, pp		ommon Information Model with Virtual Meter, Electronics and 215				
6.				rtitioning of Large Datasets in Utility Management Systems, Vol. 11, No 4, pp. 41-46, ISSN 1582-7445				
7.				IC ALGORITHM FOR PARTITIONING OF DATA MODEL IN and control, 2011, Vol. 40, No 4, pp. 316-322, ISSN 1392-				
8.				c Algorithm Approach for Utility Management System 39, No 4, pp. 310-316, ISSN 1392-124X				
9.		rić S., Erdeljan A., Lendak I., Čapko D strial Research (JSIR), 2010, Vol. 201		chitecture for Smart Metering systems, Journal of Scientific , ISSN 0022-4456				
10.		., Erdeljan A., Popović M., Švenda G.: 010, str. 555-558, ISBN 978-3-642-15		ship-Based Partitioning of Large Datasets, LNCS, Springer				
Sur	mmary data	for teacher's scientific or art and profe	essional activity:					
	ation total :		1					
-		CI) list papers :	9	I o I betermedian et				
Curre	Current projects:  Domestic: 3 International: 0							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Gak M. Dragana					
Acad	lemic title:				Lecturer			
		titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad			
<b>—</b>	ng date:				16.09.2009			
Scientific or art field:			English		-: · · ·			
Acad	lemic caries	er	Year	Institution  Faculty of Entrepreneuri	al Managomon	t Novi	Field	
Acad	lemic title el	lection:	2008	Sad	ai wanayemen	t - INOVI	English	
Magi	ster thesis		2010	Faculty of Philosophy - I	Novi Sad		English and American Literature	
Bach	elor's thesis	S	2000	Faculty of Philosophy - I	Novi Sad		English	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	AEJ1L	Englisl	h Language	e - Elementary		( A00) Arch	hitecture, Undergraduate Academic Studies	
2.	AEJ2L	Englisl	h Language	intermediate		( A00) Arch	hitecture, Undergraduate Academic Studies	
3.	AEJ2Z	Englisl	n intermedia	ate		( A00) Arch	hitecture, Undergraduate Academic Studies	
4.	AEJ3Z	Englisl	h Language	e - upper intermediate			hitecture, Undergraduate Academic Studies	
						, ,	il Engineering, Undergraduate Academic Studies	
						Undergrad	chanization and Construction Engineering, luate Academic Studies	
						( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
5.	EJ01L	English Language – Elementary				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
						( P00) Production Engineering, Undergraduate Academic Studies		
						( S00) Traffic and Transport Engineering, Undergraduate Academic Studies		
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies		
							ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
							asurement and Control Engineering, luate Academic Studies	
6.	EJ01Z	Englisl	h Language	e - Elementary		( Z01) Safe	ety at Work, Undergraduate Academic Studies	
						( ZC0) Clean	an Energy Technologies, Undergraduate Studies	
							aster Risk Management and Fire Safety, luate Academic Studies	
						(Z20) Envi	ronmental Engineering, Undergraduate Academic	
							ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
							chanization and Construction Engineering, luate Academic Studies	
7.	EJ02L	Englisl	h Language	e – Pre-Intermediate		( MR0) Me Undergrad	asurement and Control Engineering, luate Academic Studies	
			3 3			( Z01) Safe	ety at Work, Undergraduate Academic Studies	
						( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
							aster Risk Management and Fire Safety, luate Academic Studies	
						(Z20) Environmental Engineering, Undergraduate Academic Studies		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( 110) Industrial Engineering, Undergraduate Academic Studies				
8.	EJ02Z	English Language – Pre-Intermediate	( I20) Engineering Management, Undergraduate Academic Studies				
0.	20022	English Earlyaage – Fre-Intermediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies				
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies				
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies				
9.	EJ03Z	English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies				
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
			(Z20) Environmental Engineering, Undergraduate Academic Studies				
		English Language – Upper Intermediate	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
	EJ04L		( Z01) Safety at Work, Undergraduate Academic Studies				
10.			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
			(Z20) Environmental Engineering, Undergraduate Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
11.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
12.	EJ2L	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				

# ASTRAS STUDIOS

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List c	ist of courses being held by the teacher in the accredited study programmes							
	ID	Course name	Study programme name, study type					
			( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( ES0) Power Software Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
13.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
			(AH0) Architecture, Master Academic Studies					
			( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
14.	EJ3L	English Language – Advanced	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
15.	EJE5	English Language – First Certificat 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
16.	EJE6	English Language - First Certificate 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
17.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies					
18.	EJEI1	English in Engineering 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
19.	EJEI2	English in Engineering 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
20.	EJF5	English Language for GRID 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
21.	EJF6	English Language for GRID 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
22.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies					
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies					
23.	EJM	English Language – ESP Course	( M30) Energy and Process Engineering, Undergraduate Academic Studies					
25.	LJIVI	Linglish Language – Lor Course	( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies					
			( P00) Production Engineering, Undergraduate Academic Studies					
24.	EJPST	English Language in Postal Traffic	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies					
25.	EJSIT	English Language in Traffic and Transport	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies					
26.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
27.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
28.	ISIT01	English Language 1	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies					
29.	ISIT07	English Language 2	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies					
30.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	st of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
31.	ASI431	English Language 2	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				
32.	BMI80	English 1	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
33.	BMI81	English 2	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
34.	EJIIM	English for Specific Purposes	( I10) Industrial Engineering, Undergraduate Academic Studies				
J4.	Lonivi	English for opcome rurposes	( I20) Engineering Management, Undergraduate Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
35.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
		English Language – Intermediate	( F10) Engineering Animation, Undergraduate Academic Studies				
36.	EJ2Z		( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
37.	eja	English Language – a Specialized Course	(AH0) Architecture, Master Academic Studies				
38.	EJE7	English Language - Advanced	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
39.	F507	English Language for GRID 3	( F00) Graphic Engineering and Design, Master Academic Studies				
40.	NIT03	Business English	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more than 10)					
1.	Gak Drag	gana, Lorejn Hansberi i (afro) američka porodica, Zadužbina	a Andrejević, Beograd, 2012				
2.		gana, Bulatović Vesna, Bogdanović Vesna, Poređenje nasta adova sa međunarodne konferencije Jezik struke: Teorija i	ave engleskog jezika na privatnom i državnom fakultetu, praksa, Univerzitet u Beogradu, str. 705-709, Beograd, 2009.				
3.		Vesna, Gak Dragana, Bogdanović Vesna, Nastava stranih odne konferencije Jezik struke: Teorija i praksa, Univerzitet					
4.	•	vić Vesna, Gak Dragana, Univerzalana simbolika na primer lecembar , Pančevo, 2010	ru afro-američke zajednice u drami Lorejn Hansberi, Sveske,				
5.		gana, Borković Bojana, Needs Analysis: A Basis of a Succe odne konferencije Jezik struke: Izazovi i perspektive, Unive					
6.		Vesna, Gak Dragana, Speaking Skills: Advantages and Pr a međunarodne konferencije Jezik struke: Izazovi i perspek	oblems Involved When Teaching Business English, Zbornik tive, Univerzitet u Beogradu, str. 235-240, Beograd, 2011.				
7.	Gak Drag Novi Sad		cess, Metodički vidici, Filozofski fakultet Novi Sad, str.78-82,				

## TE STUDIOS STU

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

- Gak Dragana, Questionnaire an Instrument for Collecting Valuable Data from Teachers of Business English Courses, Zbornik radova sa međunarodne konferencije The Importance of Learning Professional Foreign Language for Communication Between Cultures, Faculty of Logistics, University of Maribor, Slovenia, 2012
- 9. Mirović Ivana, Gak Dragana, Trust Me I'm an Engineer, Zbornik radova sa međunarodne konferencije The Importance of Learning Professional Foreign Language for Communication Between Cultures, Faculty of Logistics, University of Maribor, Slovenia, 2012.

Summary data for teacher's scientific or art and professional activity:					
Quotation total :					
Total of SCI(SSCI) list papers :					
Current projects :	Domestic :		International:		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Strana 237

#### Science, arts and professional qualifications

Name and last name:					Grabić U. Stevan			
Academic title:			Assistant Professor					
Name of the institution where the teacher works full time and				eacher works full time and	Faculty of Technical Sciences - Novi Sad			
<b>-</b>	ng date:				10.10.1997			
					Power Electro	Power Electronics, Machines and Facilities		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2012	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
PhD	thesis		2011	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
	ster thesis		2004	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
	elor's thesis		1997	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EE305	Power	Electronics	s 1		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE425	Energy	y Converter	Control		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EE520	Desigr	n of Electric	al Machines and Converte	ers	Engineerin	er, Electronic and Telecommunication g, Master Academic Studies	
						Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EM434	Power	Electronics	3			chatronics, Undergraduate Academic Studies	
5.	EOS08	Electrical machines and devices				Energy, Ur	ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies	
6.	EOS12	Power electronics					ver Engineering - Renewble Sources of Electrical Indergraduate Professional Studies	
7.	EOS17	Software tool in power electronics				(E01) Pow Energy, Ur	ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
8.	EOS23	Wind E	Energy Con	version System			ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
9.	EOS32	Grid co	onnected re	enewable energy systems			ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
10.	Z107	Electri	cal Enginee	ering, Environment and Pr	otection	` '	ety at Work, Undergraduate Academic Studies ronmental Engineering, Undergraduate Academic	
11.	EE0406	Flectri	c Power Qu	ality		, ,	er, Electronic and Telecommunication	
ļ '''	LLUTUU	Licotii	CT OWCI QU	adiity		<del></del>	g, Undergraduate Academic Studies	
12.	EE406	Electri	c Power Qu	uality		Engineerin	er, Electronic and Telecommunication g, Master Academic Studies	
13.	EE520	Design	of Electric	al Machines and Converte	ers	Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies	
			. 5. 2.00010	OTTO			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
14.	M2551	Hybrid	and electri	c vehicles		Àcadémic		
15.	M2552	Autom	otive electr	ics		( M22) Me Academic	chanization and Construction Engineering, Master Studies	
16.	S0I51Ž	Electri	cal Substat	ion and Electric Traction		( S00) Trat Studies	ffic and Transport Engineering, Master Academic	
17.	SI011	Wind,	solar and s	mall hydro power plants			ver, Electronic and Telecommunication g, Specialised Professional Studies	
18.	SI041	Grid co	onnected re	enewable energy systems			ver, Electronic and Telecommunication g, Specialised Professional Studies	
19.	19. EE544 Renewable energy sources (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies							
Rep	Representative refferences (minimum 5, not more than 10)							
1	S.Grabić, N.Čelanović, V.Katić: Series Converter Stabilized Wind Turbine with Permanent Magnet Synchronous Generator, 35th							

S.Grabic, N.Celanovic, V.Katic. Series Converter Stabilized Wild Turbline with Permanent Magnet Synchronous Generator, 35th IEEE Power Electronics Specialists Conference PESC 2004, Aachen (Germany), pp. 464-468.

Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)								
2.	M.Vekić, Z.Ivanović, S.Grabić, V.Katić: Control of Variable Speed Wind Turbine Under Grid Disturbances, 13th International Symposium on Power Electronics - Ee2005, Novi Sad, no.T7-1.1.								
3.	Z.Ivanović, M.Vekić, S.Grabić, V.Kati: Control of Multilevel Converter Driving Variable Speed Wind Turbine in Case of Grid Disturbances, 12th International Power Electronics and Motion Control Conference EPE-PEMC 2006, Portoroz (Slovenija), pp. 1569-1573.								
4.	E.Adzić, S.Grabić, V.Katić: Analysis and Control International Symposium Nikola Tesla, 2006, B		M in Distribution I	Network Voltage Control Mo	de, VIth				
5.	M.Milošević, G.Andersson, S.Grabić: Decouplin Photovoltaic Source, Power Systems Conferen				wer Network with				
6.	V.Katić, Z.Čorba, D.Milićević, S.Grabić, Z.Ivand Sources for Application in Vojvodina, PSU-UNS (Thailand).								
7.	Z.Ivanović, M.Vekić, S.Grabić, V.Katić: Modelo konferencija ETRAN, Beograd, jun 2006, str.34		režnog invertora	u slucaju nesimetrije u siste	emu, 50.				
8.	Ivanović Z., Adžić E., Vekić M., Grabić S., Čela Storage Connected to Smart Grid Under Unbal Power Electronics, 2012, Vol. 27, ISSN 0885-8	anced Conditions, Av							
9.	Vekić M., Grabić S., Majstorović D., Čelanović Complex Power Electronics Systems, IEEE Tra				relopment of				
10.	Grabić S., Čelanović N., Katić V.: Permanent Magnet Synchronous Generator Cascade for Wind Turbine Application, IEEE Transaction on Power Electronics, 2008, Vol. 23, No 3, pp. 1136-1142, ISSN 0885-8993								
Sur	Summary data for teacher's scientific or art and professional activity:								
Quot	Quotation total: 36								
Tota	Total of SCI(SSCI) list papers:  4								
Curre	Current projects: Domestic: 2 International: 0								

## RESTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Grahovac					Grahovac M.	M. Nenad		
Acad	lemic title:				Assistant Pro	ssistant Professor		
		titution v	vhere the te	acher works full time and	Faculty of Te	ty of Technical Sciences - Novi Sad		
					29.12.2004			
Scientific or art field: Mechanics					Mechanics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Mechanics	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Mechanics	
Magi	ster thesis		2005	Faculty of Technical Sci	ences - Novi S	ad	Continuum Mechanics	
Bach	elor's thesi	S	2002	Faculty of Technical Sci	ences - Novi S	ad	Deformable Body Mechanics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	A207	Mecha	nics			` ′	nitecture, Undergraduate Academic Studies ineering Animation, Undergraduate Academic	
2.	E104	Mecha	ınics			Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
							asurement and Control Engineering, luate Academic Studies	
3.	GG07	Mecha	inics 1				il Engineering, Undergraduate Academic Studies	
4.	H112	Mecha	ınics 1 – Fu	ndamentals		( H00) Mechatronics, Undergraduate Academic Studies ( S00) Traffic and Transport Engineering, Undergraduate Academic Studies		
5.	H201	Mecha	nics 2 - Ge	neral		( H00) Med	chatronics, Undergraduate Academic Studies	
6.	H303	Mecha	tronics 3 –	Further Chapters		( H00) Mechatronics, Undergraduate Academic Studies		
7.	M204	Streng	th of Materi	als		Undergrad ( M30) Ene Academic ( M40) Tec Undergrad ( P00) Prod	chanization and Construction Engineering, luate Academic Studies ergy and Process Engineering, Undergraduate Studies chnical Mechanics and Technical Design, luate Academic Studies duction Engineering, Undergraduate Academic	
8.	M4401	Contin	uum mecha	anics			chnical Mechanics and Technical Design, luate Academic Studies	
9.	BMI127	Biome	chanics			Studies		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	II1004	Mecha	inics and In	dustrial Engineering		( I10) Indus Studies	strial Engineering, Undergraduate Academic	
11.	M44041	Dynan	nics of non-	smooth mechanical system	ms		chnical Mechanics and Technical Design, uate Academic Studies	
12.	M44061	Optimi	zation of m	echanical systems			chnical Mechanics and Technical Design, luate Academic Studies	
13.	BMIM4A	Transp	ort phenon	nena and Living systems		(BM0) Bio	medical Engineering, Master Academic Studies	
14.	M45991	Biome	chanics of	cardiovascular system		( M40) Ted Academic	chnical Mechanics and Technical Design, Master Studies	
15.	SZD051		ations of op nment prote	timal control theory in livir	ng	( Z00) Env Studies	ironmental Engineering, Specialised Academic	
16.	DM801	Biome	dical mecha	anics		( M40) Ted	chnical Mechanics, Doctoral Academic Studies	
17.					( M00) Med	chatronics, Doctoral Academic Studies chanical Engineering, Doctoral Academic Studies chnical Mechanics, Doctoral Academic Studies		
						( S00) Traffic Engineering, Doctoral Academic Studies		

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programme name, study type						
18.	DTM03	Biomechanical models and analysis	of impact	( M40) Technical	Mechanics, Doctoral Acade	emic Studies				
19.	2. ZRD16A Selected chapters in mechanics and elasticity theory (Z01) Safety at Work, Doctoral Academic Studies									
Rep	Representative refferences (minimum 5, not more than 10)									
1.	Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, INT J BIFURCAT CHAOS, 2012, Vol. 22, No 4, pp. 1-10, ISSN 0218-1274									
2.		c N., Žigić M.: Modelling of the hamst ns, 2010, Vol. 59, No 5, pp. 1695-170		use of fractional d	erivatives, Computers and N	Nathematics with				
3.		nov V., Maretić R., Grahovac N.: Bud f Mechanics - A: Solids, 2009, Vol. 28			supported by Cardan joints	, European				
4.		hovac, M. M. Zigić, and D. T. Spasić: n Society of Mechanics, Beograd: Sei				onal Congress				
5.		c N., Žigić M: Fractional derivative viso ation and its Applications, Ankara, Tu			group, 3rd IFAC Workshop	on Fractional				
6.	Internatio	Grahovac N.: Dynamical behavior of nal Congress of Serbian Society of M //534(082)								
7.		c N., Žigić M., Spasić D.: On impact s I Differentiation and Its Applications, I			n type of dissipation, 4. IFAC	C Workshop on				
8.		c N.: Generalized Zener model in the Society of Mechanics, Palić: Serbian (082)								
9.	Žigić M., Grahovac N., Spasić D.: A simplified earthquake dynamics of a column like structure with fractional type of dissipation, 1. International Congress of Serbian Society of Mechanics, Kopaonik: Serbian Society of Mechanics, 10-13 April, 2007, pp. 165-172, ISBN 978-86-909973-0-5, UDK: 531/534(082)									
10.	Kovinčić N., Žigić M., Grahovac N., Spasić D.: On Impact in Biomechanical Systems, International scientific conference on mechanics, 6. International Scientific Conference on Mechanics - Sixth Polyakhov's Reading, Saint Petersburg, 31-3 Januar, 2012, pp. 251-251, ISBN 978-5-91563-101-3									
Sun	nmary data	for teacher's scientific or art and profe	essional activity:							
	ation total :		5							
	Total of SCI(SSCI) list papers: 3									
Curre	Current projects : Domestic : 1 International : 0									

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Grbić P. Tatjana					
Academic title:			Assistant Professor					
			,					
starting date:			15.12.1995					
Scie	ntific or art f	ield:			Mathematics			
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	ection:	2009	Faculty of Technical Science	ences - Novi Sa	ad	Mathematics	
PhD	thesis		2008	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
Magi	ster thesis		1999	Faculty of Sciences - No			Mathematical Sciences	
Bach	elor's thesis	3	1993	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
List	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E135	Probal	hility Static	tics and Stochastic Proces	2000		asurement and Control Engineering, luate Academic Studies	
'.	L 100	TTODA	omity, otatis	tics and Stochastic Froces			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
2.	E212	Mathe	matical Ana	alysis 1			tware Engineering and Information Technologies, uate Academic Studies	
						( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
3.	GI303B	Probal	bility and M	athematical Statistics		( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
							ety at Work, Undergraduate Academic Studies	
						( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
4.	Z104	Mathe	matics 1				aster Risk Management and Fire Safety, luate Academic Studies	
						(Z20) Envi	ronmental Engineering, Undergraduate Academic	
						( Z01) Safe	ety at Work, Undergraduate Academic Studies	
5.	Z203	Statist	ical Method	s			aster Risk Management and Fire Safety, luate Academic Studies	
						(Z20) Envi Studies	ronmental Engineering, Undergraduate Academic	
6.	BMI91	Mathe	matics 1			( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
7.	BMI92	Mathe	matics 2			( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
8.	IA001	Algebr	ra			( F10) Eng Studies	ineering Animation, Undergraduate Academic	
9.	IA002	Mathe	matical Ana	alysis		( F10) Eng Studies	ineering Animation, Undergraduate Academic	
10.	P216	Numer	rical Analys	is		( P00) Prod Studies	duction Engineering, Undergraduate Academic	
11.	S01361	Busine	ess decisior	n making			ital Traffic and Telecommunications, luate Academic Studies	
12.	0M505	Stochastic Processes				( OM1) Ma Studies	thematics in Engineering, Master Academic	
13.	0ML505	Stocha	astic Proces	sses		( OM1) Ma Studies	thematics in Engineering, Master Academic	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes								
		- 3							
	ID	Course name	Study programme name, study type						
14.	DZ01MS	Selected Chapters in Mathematics	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies (I12) Industrial Engineering, Specialised Academic Studies (I22) Engineering Management, Specialised Academic Studies (Z00) Environmental Engineering, Specialised Academic						
15	70502	Ctatistical Advanced Madela	Studies (701) Sefety at Work, Master Apademia Studies						
15.	ZR503	Statistical Advanced Models	( Z01) Safety at Work, Master Academic Studies						
16.	MPK001	Statistical and Numerical Methods	( MPK) Inženjerstvo tretmana i zaštite voda - TEMPUS(uneti naziv na engledskom), Master Academic Studies						
17.	SDOM3 0	Probability, Statistics and Theory of Engineering Experiment	( Z00) Environmental Engineering, Specialised Academic Studies						
18.	D0M01	Functional Analysis 1	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
19.	D0M07	Mathematical Foundations of Fuzzy Systems	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
20.	D0M19	Functional Analysis 2	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
21.	D0M21	Fuzzy Systems and Their Applications	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
22.	D0M50	Fuzzy Measures and Integrals	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
23.	D0M51	Large Deviations Principles	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
24.	D0M52	Random Sets	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
25.	D0M53	Statistical Processing of Fuzzy Data	( OM1) Mathematics in Engineering, Doctoral Academic Studies						
26.	DOM30	Probability, Statistics and Theory of Engineering Experiment	( M00) Mechanical Engineering, Doctoral Academic Studies ( M40) Technical Mechanics, Doctoral Academic Studies ( Z00) Environmental Engineering, Doctoral Academic Studies ( Z01) Safety at Work, Doctoral Academic Studies						
27.	DZ01M	Selected Chapters in Mathematics	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (E20) Computing and Control Engineering, Doctoral Academic Studies (F00) Graphic Engineering and Design, Doctoral Academic Studies (F20) Engineering Animation, Doctoral Academic Studies (G00) Civil Engineering, Doctoral Academic Studies (G10) Geodesy and Geomatics, Doctoral Academic Studies (H00) Mechatronics, Doctoral Academic Studies (I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies (M00) Mechanical Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (S00) Traffic Engineering, Doctoral Academic Studies (Z00) Environmental Engineering, Doctoral Academic Studies (Z01) Safety at Work, Doctoral Academic Studies						

Representative refferences (minimum 5, not more than 10)

^{1.} Ralević, N.M., Nedović, Lj., Grbić, T., :"The pseudo-linear superposition principle for nonlinear partial differential equations and representation of their solution by the pseudo-integral", Fuzzy sets and systems, 2005, No.155, 89-101



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



	Engineering								
Rep	Representative refferences (minimum 5, not more than 10)								
2.	Nedović, Lj., Ralević, N. M., Grbić, T.,: " Large 2005, No. 105, 65-76	deviation principle with	h generated pseu	do measures", Fuzzy sets a	nd systems,				
3.	Štajner-Papuga, I., Grbić, T., Dankova, M., "Pseud-Riemann-Stieltjes integral ", Information Sciences 179, 2009, 2923-2933								
4.	M. Štrboja, T. Grbić, I. Štajner-Papuga, G. Grufunctions, FSS, doi:10.101016/j.fss.2012.07.01		and Chebyshev in	equalities for pseudo-integra	als of set-valued				
5.	Grbić, T., Pap, E., : "Generalization Of Portamnteau theorem with respect to the pseudo-weak convergence of random closed sets", Theory of Probability and its Applications, 2009, 97-115								
6.	T. Grbić, I. Štajner-Papuga, M. Štrboja, an approach to pseudo-integration of set-valued functions, Information Sciences 181 (2011), 2278-2292								
7.	T. Grbić, S. Medić, I. Štajner-Papuga, T. Došenović, Inequalities of Jensen and Chebyshev type for interval-valued measures based on pseudo-integrals. In: Intelligent Systems: Models and Applications, E. Pap, Ed., Springer-Verlag, pp 23-41, DOI:10.1007/978-3-642-33959-2 2								
8.	Štajner-Papuga, I., Grbić, T., Dankova, M., "Ric Mathe., Vol. 36, No. 2, 111-124	emann-Stieltjes type ir	ntegral based on (	generated pseudo-operation	s", NS J.				
9.	Nedović, Lj., Grbić, T., "The pseudo-probability	", Journal of Electrical	Engineering, 200	02, Vol. 53, No. 12/s, 27-30					
10.	Mihailović, B., Nedović, T., Grbić, T., "The induced Sugeno integral-based operator w.r.t. bi-fuzzy measures", Journal of Electrical engineering, Vol. 54, No. 12/s, 76-79								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	ation total :	17							
Total	of SCI(SSCI) list papers :	6							
Curre	ent projects :	Domestic :	2	International :	0				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:					Gušavac J. Strahil				
-	Academic title:			Assistant Professor						
Nam	e of the inst	itution v	vhere the te	eacher works full tim	ne and	Faculty of Technical Sciences - Novi Sad				
	ng date:					01.10.1992				
Scie	ntific or art f	ield:				Electroenergetics				
Acad	lemic carie	er	Year	Institution				Field		
Acad	lemic title el	ection:	2011	Faculty of Technic	cal Sci	ences - Novi Sa	ad	Elect	roenergetics	
PhD	thesis		2011	School of Electrica	al Engi	ineering - Beog	rad	Elect	roenergetics	
Magi	ster thesis		1999	School of Electrica	al Engi	ineering - Beog	rad	Elect	roenergetics	
Bach	elor's thesis	3	1988	Faculty of Technic	cal Sci	ences - Novi Sa	ad	Elect	roenergetics	
List	of courses b	eing hel	ld by the te	acher in the accredi	ited stu	ıdy programme	:S			
	ID	Course	e name				Study pro	gramr	ne name, study type	
1.	EE305	Power	Electronics	s 1					ctronic and Telecommunica dergraduate Academic Stud	
2.	EE407	Flectri	ral Installat	ions and Industrial F	Power	Engineering	( ES0) Pow Academic		ftware Engineering, Underg s	raduate
۷.	LL401	Licotin	cai matanat	ions and industrial i	OWCI	Linginiceting			ctronic and Telecommunica dergraduate Academic Stud	
3.	EE425	Energy	Energy Converter Control					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	EOS08	Electric	Electrical machines and devices						gineering - Renewble Sourc aduate Professional Studies	
5.	S0I51Ž	Electric	cal Substat	ion and Electric Tra	ction		( S00) Traf Studies	ffic and	d Transport Engineering, Ma	aster Academic
Rep	oresentative	reffere	nces (minin	num 5, not more tha	an 10)					
1.	Tehnička	analiza	eksploatad	cione pouzdanosti e	lektroe	energetskih pos	teojenja ind	lustrije	cementa	
2.	Razvoi m	etodolo	gije za efika	asno održavanje nad	dzemn	ih vodova uz u	važavanie r	oouzda	ınosti	
3.	S. Gušav ISSN 037			j. Gerić : Estimation	of ove	erhead line cond	dition, Electi	ric Pov	ver Systems Research 78 (	2008) 566–583.,
4.	Beočin, N	/lonogra al Scien	ph : Conter ices - Novi	mporary Problems in	n Powe	er Engineering,	Edited by E	D. Gvo	nd Management in the Cem zdenac, J. Xypteras and M. reece), 1995., pp. 133-141.	Dimić, Faculty
5.	Lj. Gerić, Problems	P. Đapi in Pow	ć, S. Gušav er Enginee	ring, Edited by D. G	vozde	nac, J. Xyptera	s and M. Di	mić, F	Power System, Monograph aculty of Tehnical Sciences N 0354-8449, 621.3(082).	
6.	S. Gušav 0013-575	ac,S. Đi 55, UDC	ukić, J. Luk 620.9, Bed	ić i Lj. Krička : Ocer ograd, strane 82-95,	na stan , UDK:	ija temelja i stu 624.153.542.2	bova nadze , 621.315	mnog	voda, , Elektroprivreda, bro	j 1, 2008, ISSN
7.	"Savreme	eni aspe		nergetike", uredio V					u široke potrošenje, Monog ut za energetiku i elektronik	
8.									ages Due to Outage Costs i nce, June 23th-26th, Bologr	
9.	S. Gušavac, M. Nimrihter, S. Novaković, Ž. Savanović: Overhead Lines Maintenance Information System, Colloquium on Overhead Lines Revitalization, Beograd, May 06-10,2003, paper R3-01. ISBN 86-82317-46-X, 621.316.1(082)									
Sur	Summary data for teacher's scientific or art and professional activity:									
Quot	Quotation total : 0									
Total	of SCI(SS	CI) list p	apers :		1					
Curre	ent projects	:			Dome	estic :	1		International:	0



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Gvozdenac D. Dušan			
<b>—</b>	demic title:	anno.			Full Professor			
		titution v	vhere the te	eacher works full time and				
starti	ing date:				01.06.1973			
Scie	ntific or art f	ield:			Thermal Ener	Thermal Energetics and Thermotechnics		
Acad	demic carie	er	Year	Institution	Field			
Acad	demic title e	lection:	1993	Faculty of Technical Sci	ences - Novi S	ad	Thermal Energetics and Thermotechnics	
PhD	thesis		1981	Faculty of Mechanical E	ngineering - Be	eograd	Thermal Energetics and Thermotechnics	
Magi	ister thesis		1978	Faculty of Technical Sci	ences - Novi S	ad	Thermal Energetics and Thermotechnics	
Bach	nelor's thesis	S	1973	Faculty of Technical Sci	ences - Novi S	ad	Thermal Energetics and Thermotechnics	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EOS38	Energe	etski menad	džment		Ènergy, Ur	ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
2.	M119	Energy	y Transform	ations		Académic		
3.	M222A	Energy	y System E	ngineering		Academic		
4.	M3311	Renev	vable Energ	y Sources		Academic		
						( ZC0) Clea	an Energy Technologies, Undergraduate Studies	
5.	M3501	Refrige	eration Dev	ices		( M30) End Academic	ergy and Process Engineering, Undergraduate Studies	
6.	Z206	Alterna	ative Power	Engineering		(Z20) Envi	ronmental Engineering, Undergraduate Academic	
7.	Z206A	Alternative Energy Sources				( Z01) Safe	ety at Work, Undergraduate Academic Studies	
8.	Z206	Alternativna energetika(uneti naziv na engl			eskom)	(Z20) Envi	ronmental Engineering, Undergraduate Academic	
9.	E2313	Funda	mentals of	Process and Energy Engi	neering	Àcadémic		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	II1044	Energy	y flows and	energy efficiency		(110) Industrial Engineering, Undergraduate Academic Studies		
11.	M211	Measu	rement and	l Regulation		( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
						( ZC0) Clea	an Energy Technologies, Undergraduate Studies	
12.	M3031		eering Calco atus and Ec	ulations of Energy Techno uipment	logies	( ZC0) Clea	an Energy Technologies, Undergraduate Studies	
13.	M3494	Energy	y efficiency			( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
15.	1110434	Litera	, childridy			( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
14.	1939	Meren	je, nadzor i	upravljanje		( M50) Ene	ergy Management, Master Academic Studies	
15.	IMDS78		ana poglavl na englesko	ja iz energetskog menadž om)	źmenta(uneti	( I22) Engi Studies	neering Management, Specialised Academic	
16.	M3503			ranje termoenergetskih naziv na engleskom)		Studies	ergy and Process Engineering, Master Academic	
17.	M3M07	Energy	y storage			( ZC0) Clea	an Energy Technologies, Master Academic	
18.	M5022	Renev	vable energ	y sources		( M50) Ene	ergy Management, Master Academic Studies	
19.	SZSP24	Savrer	meni princip	i energetskog menadžme	enta	( Z00) Environmental Engineering, Specialised Academic Studies		
20.	DM216	Energy	y Systems			( M00) Mechanical Engineering, Doctoral Academic Studies		
21.	DM217	Energy Management in Idustry				( M00) Med	chanical Engineering, Doctoral Academic Studies	

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programi	me name, study type			
22.	DM218	Contemporary Energy Technologies		( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
23.	DM219	Energy Politics		( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
24.	DM302	Engineering Experimental Methods		( H00) Mechatro	nics, Doctoral Academic Stu	dies		
27.	DIVIOUZ	Engineering Experimental Methods		( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
25.	DM309	Energy Management Methods		( M00) Mechanio	cal Engineering, Doctoral Ac	ademic Studies		
26.	DM332	Energy Management in Buildings		( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
27.	DM333	Renewable Energy Resoruces		( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
28.	ZSP24	Modern Principles of Energy Manage	ement	( Z00) Environme Studies	ental Engineering, Doctoral	Academic		
29.	IMDR78	Odabrana poglavlja iz energetskog r naziv na engleskom)	menadžmenta(uneti	( I20) Industrial E Doctoral Academ	Engineering / Engineering Manic Studies	anagement,		
Rep	resentative	refferences (minimum 5, not more th	an 10)					
1.	1. Energy Efficiency in Food Processing Industry – East European Experience, edited by D. Gvozdenac, UNDP/UNIDO Project DP/RER/83/003, Novi Sad, pp. 123, 1991.							
2.	2. Conterporary problems in Power Engineering (monograph), Novi Sad/Thesaloniki, Gvozdenac D, Xypteras J, Dimić M. 1996.							
3.	3. Measurement and regulation (Selected chapters for operators of large power plants), Institute of energy and process engineering, Novi Sad, Gvozdenac, D, Pešenjanski, I,1980. (in Serbian).							
4.	Measurei Serbian).	ment and Regulation in Thermal Engir	neering, Faculty of Ted	chnical Sciences,	Gvozdenac, D, Novi Sad, 20	000. (in		
5.	Bilansirar 2006.	nje energetskih tokova, Pokrajinski ce	ntar za energetku efika	asnost, Gvozdena	ac, D., Marić, M., Petrović, J.	, Novi Sad,		
6.		ac D, Menke C, Vallikul P, Petrovic J, Energy, Volume 34, Issue 4, 2009, p		sment of potential	for natural gas-based coger	neration in		
7.		natical Model for Heat Transfer in Cor E Journal of Engineering for Power, V			rs, Gulič, M, Gvozdenac, D,	Transactions of		
8.		oenwattana W, Menke C, Kamolpus Dation Plant in Public Buildings in Thaila				Natural-Gas		
9.		s counter cross-flow heat exchangers ertragung, Vol. 20, 1986, pp. 151 – 16		ed throughout, Gv	vozdenac, D, Waerme - und			
10.	Analytica	I Solution of the Transient Response of the Journal of Heat Transfer, Vol. 108,	of Gas-to-Gas Cross-f	low Heat Exchanç	ger With Both Fluids Unmixe	d, Gvozdenac,		
Sur	nmary data	for teacher's scientific or art and profe	essional activity:					
Quot	ation total :		71					
Total	of SCI(SS	CI) list papers :	26					
Curre	Current projects : Domestic : 2 International : 1							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Hajduković P. Miroslav			
Acad	emic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				01.07.1993			
Scie	ntific or art f	ield:			Applied Comp	mputer Science and Informatics		
Acad	emic carie	er	Year	Institution			Field	
Acad	emic title e	lection:	1998	Faculty of Technical Science	ences - Novi Sa	ad	Applied Computer Science and Informatics	
PhD	thesis		1984	Faculty of Electrical Eng	ineering - Sara	jevo	Applied Computer Science and Informatics	
Magi	ster thesis		1980	Faculty of Electrical Eng			Applied Computer Science and Informatics	
Bach	elor's thesi	S	1977	Faculty of Electrical Eng	ineering - Sara	jevo	Applied Computer Science and Informatics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	S		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E217	Compi	uter Archite	cture		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
	LZ17	Compt	nter Archite	Citare		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
2.	E225	Operat	ting System	ns		Academic		
			J = , 5.511			Àcadémic		
						( E20) Computing and Control Engineering, Undergraduate Academic Studies		
3.	E243	Human Computer Interaction				( SE0) Software Engineering and Information Technologies Undergraduate Academic Studies		
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
4.	EE301	Operating Systems and Competitive Programmir			mmina		asurement and Control Engineering, uate Academic Studies	
		Орога	ung Cyclon		g		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Àcadémic		
						( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
5.	RI4A	Computer Graphics				( F10) Eng Studies	ineering Animation, Undergraduate Academic	
							tware Engineering and Information Technologies, luate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - indergraduate Academic Studies	
						Academic		
6.	E2529	Paralle	el and distril	buted architectures		Studies	ver Software Engineering, Master Academic	
		· Granc				Academic		
						(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
7.	DAU014	Selecte	ed Topics ir	n Computing		Academic		
				- rg		Studies	thematics in Engineering, Doctoral Academic	
8.	DRNI18	Selected Topics in Distributed/Mobile computing			uting	( E20) Computing and Control Engineering, Doctoral Academic Studies ( F20) Engineering Animation, Doctoral Academic Studies		
Rer	oresentative	reffere	nces (minin	num 5, not more than 10)		· · / <b>-</b> · · · 9		
1.			`	jezik CONCERT", Pomoć	ni udžbenik Ed	kultet tehni	čkih nauka 1995	
ı 'd	i iajuukuv	IO IVI., F	rogramski	JOZIN OCHOLINI , FUIIIUU	in uuzbeilik, Fd	munici iciiill	omii nauna, 1000.	

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)							
2.	Hajduković M., "Organizacija računara", Pomod	ćni udžbenik, Fakultet	tehničkih nauka,	1996.				
3.	Hajduković M., Suvajdžin Z., "Uvod u međunarodni standard IEC 61131-3", Pomoćni udžbenik, Fakultet tehničkih nauka, 2002.							
4.	Hajduković M., "Operativni sistemi", Osnovni ud	džbenik, Fakultet tehn	ičkih nauka, 2004					
5.	Hajduković M., "Arhitektura računara", Osnovni	i udžbenik, Fakultet te	hničkih nauka, 20	04.				
6.	Hajduković M. i ostali, "The active side principle 1996., 121- 127	e approach to the clier	nt server protocol	design", YUJOR, vol. 6, no.	1, Belgrade,			
7.	Hajduković M. i ostali, "Uninterruptable and other regions", YUJOR, vol. 8, no. 2, Belgrade, 1998., 323- 329							
8.	Hajduković M. i ostali, "Communication models: an educational framework for parallel programming", YUJOR, vol. 9, no. 1, Belgrade, 1999., 129- 139							
9.	Hajduković M. između ostalih, "Character orien 53-65	ited program editing –	habit or necessity	/?", NSJOM, vol. 33, no. 1, N	lovi Sad, 2003.,			
10.	Hajduković M. između ostalih, "A problem of program execution time measurement", NSJOM, vol. 33, no. 1, Novi Sad, 2003., 67-73							
Su	mmary data for teacher's scientific or art and profe	essional activity:						
Quo	tation total :	11						
Tota	l of SCI(SSCI) list papers :	3						
Curr	ent projects :	Domestic :	1	International :	0			



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:						Jeftenić I. Borislav			
Academic title:						Full Professor	ſ		
Nam	Name of the institution where the teacher works full time and					School of Electrical Engineering - Beograd			
starting date:						11.03.1974			
Scie	ntific or art f	ield:				Power Electro	nics, Machi	nes and Facilities	
Acad	lemic carie	er	Year	Institution				Field	
Acad	lemic title e	ection:	2011	School of Electrica	al Engi	ineering - Beog	rad	Power Electronics, Machines	and Facilities
PhD	thesis		1987	School of Electrica	al Engi	ineering - Beog	rad	Electrical and Computer Engir	neering
Magi	ster thesis		1978	School of Electrica	al Engi	ineering - Beog	rad	Electrical and Computer Engir	neering
Bach	elor's thesi	S	1972	School of Electrica	al Engi	ineering - Beog	rad	Electrical and Computer Engir	neering
List	of courses b	eing hel	ld by the tea	acher in the accredi	ted stu	udy programme	s		
	ID	Course	e name				Study pro	gramme name, study type	
1.	EE418	Electric	c Motor Dri	v/05			( ZC0) Clea	an Energy Technologies, Under Studies	graduate
1.	LL410	Liectin	C IVIOLOI DII	ves		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
2.	EE427	Contro	of Electric	al Drives				er, Electronic and Telecommuni g, Undergraduate Academic Sti	
3.	EE535	Electric	c Traction \	/ehicles				er, Electronic and Telecommuni g, Master Academic Studies	cation
Representative refferences (minimum 5, not more than 10)									
1. B. Jeftenić, V. Vasić, Đ. Oros, "Elektromotorni pogoni - zbirka rešenih zadataka" Akademska misao, Beograd 2003									
2.	B. Jeftenić, V. Vasić, Đ. Oros, "Regulisani elektromotorni pogoni - rešeni problemi sa elementima teorije" Akademska misao, Beograd 2004								
3.			ıčković, "Pr 466-106-8	aktikum za laborato	rijske v	vežbe iz elektro	motornih po	ogona", ETF Beograd, treće pro	šireno izdanje
4.				tkić, "Višemotorni el R.ID 183865100	ektričr	ni pogoni", ISBI	N: 978-86-74	166-402-5, Akademska misao, I	Beograd 2011.
5.	Transpor	tation", I	IEEE Trans					fficiency of Variable Speed Bulk 969, 2012, Digital Object Identifi	
6.								of Sensors", IEEE Transactions al Object Identifier 10.1109/TIE	
7.								trol of induction motor based or 2010 4 (6):462-473., ISSN 175	
8.		g and th						essor: the Phenomenon Analyse ring (IREE), February 2008, ISS	
9.	Advance	s in Elec		Computer Engineering				IC, "Multi-Motor Drives for Cran p. 57-62, doi: 10.4316/AECE.20	
10.	B. Jeftenić, S.Statkić, M. Bebić, L. Ristić, "New concept of electrical drives for paper and board machines based on energy efficiency principles", Thermal Science 4/2006, Časopis termičara Srbije i Crne gore, Vol. 10, Number 4, Belgrade 2006, ISSN: 0354-9836, pp. 63-78. (UDC:676.026.23/.25, BIBLID:0354-9836)								
Summary data for teacher's scientific or art and professional activity:									
Quotation total: 64									
Tota	of SCI(SS	CI) list p	apers :		13				
Current projects : Domestic :				estic:	2	International:	0		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

				•					
Name and last name:					Juhas T. Anamarija				
<b>—</b> —	lemic title:				Assistant Professor				
		titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad				
	ng date:				01.11.1990				
	ntific or art f			1 000	Theoretical E	lectrotechni			
	lemic carie		Year	Institution			Field		
	lemic title e	lection:	2010	Faculty of Technical Sci			Theoretical Electrotechnics		
PhD	thesis		2009	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering		
Magi	ster thesis		1994	School of Electrical Eng			Electrical and Computer Engineering		
	elor's thesi		1990	Faculty of Technical Sci			Electrical and Computer Engineering		
List	List of courses being held by the teacher in the accredited study programmes								
	ID	Course	e name			Study pro	gramme name, study type		
1.	EE300	Electro	omagnetics				er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	EOS01	Funda	mental elec	etrical engineering			ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies		
3.	1087	Electri	cal Enginee	ering in Industrial Engineer	ring	( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic		
							chanization and Construction Engineering, uate Academic Studies		
						( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies		
4.	M112	Electri	Electrical Engineering and Electric Machines				chnical Mechanics and Technical Design, uate Academic Studies		
4.	IVITIZ	Electri				( P00) Prod Studies	duction Engineering, Undergraduate Academic		
						( S00) Traf Academic	fic and Transport Engineering, Undergraduate Studies		
							tal Traffic and Telecommunications, uate Academic Studies		
						( Z01) Safe	ety at Work, Undergraduate Academic Studies		
5.	Z107	Electri	cal Enginee	ering, Environment and Pr	otection	(Z20) Envi	Environmental Engineering, Undergraduate Academic es		
6.	II1007	Eundo	montal alac	strical anaincoring		( I10) Indus Studies	strial Engineering, Undergraduate Academic		
0.	111007	runua	mental elec	trical engineering		( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies		
7.	URZP12	Introdu	uction to ele	ectrical engineering			aster Risk Management and Fire Safety, uate Academic Studies		
8.	DE208S	Select	ed Chapter	s on Electromagnetic Con	npatibility		ver, Electronic and Telecommunication g, Specialised Academic Studies		
9.	DE408S	Select	ed chapters	s inl electromagnetics			ver, Electronic and Telecommunication g, Specialised Academic Studies		
10.	EE543	Electro	o Magnetic	Energy			er, Electronic and Telecommunication g, Master Academic Studies		
11.	H799	Fieldb	uses and pi	rotocols		( H00) Med	chatronics, Master Academic Studies		
12.	DE208	Select	ed Chapter	s on Electromagnetic Con	npatibility		ver, Electronic and Telecommunication g, Doctoral Academic Studies		
13.	DE408	Select	ed Chapter	s in Electromagnetics		(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
Rep	Representative refferences (minimum 5, not more than 10)								
1.							plifier based upon a finite number of harmonics"," 3-1625, June 2009. ISSN 0018-9480.		
2.				stić, "Signals with Flattene tions on Broadcasting, vol			ver Analysis of HFHPTA: Theory and . ISSN 0018-9316		
3.				has, "Increasing Efficienc ng, vol. 47, no. 1, pp.32-37			HPTA by Injection of Two Harmonics", IEEE		



Current projects:

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

Power, Electronic and Telecommunication Engineering

UNDERGRADUATE ACADEMIC STUDIES

Re	Representative refferences (minimum 5, not more than 10)							
4.	D. Herceg, A. Juhas, M. Milutinov,." A design of a four square coil system for a biomagnetic experiment," Facta universitatis - series: Electronics and Energetics, 2009, Vol. 22, No 3, pp. 285-292. ISSN 0353-3670							
5.	L. A. Novak, A. Juhas, "O broju maksimuma u dvočlanim složenoperiodičnim funkcijama: krive katastrofa", Elektrotehnika, br. 1-2, pp. E7-E10, 1994.							
6.	A. Juhas, M. Milutinov, M. Prša, "Magnetic field of multi-line power system", Scientific bulletin of the "Politehnica" University of Timisoara, Proceedings of the 7th Int. Power Systems Conf., Timisoara, Romania, 22-23 Nov. 2007, Tom 52, pp. 319-328. ISSN 1582-7194.							
7.	M. Milutinov, A. Juhas, M. Prša, "Electric and magnetic field in vicinity of overhead multi-line power system", Acta Electrotehnica, Proceedings of the 2nd Int.I Conf. on Modern Power Systems MPS 2008, Cluj-Napoca, Romania, 12-14 Nov.r 2008, pp. 313-316. ISSN 1841-3323.							
8.	A. Juhas, M. Milutinov, N. Pekarić-Nađ, "Iskustva u primeni nacionalnih pravilnika o nejonizujućim zračenjima", Telekomunikacije, No 7, pp. 70-77, 2011. ISSN 1820-7782							
9.	A. Juhas, M. Milutinov, D. Herceg, M. Prša, N. intenziteta za potrebe biomagnetskih ekspreim	Pekarić-Nađ, "Uređaj za generisanje homogenog magnetskog polja kontrolisanog enata",Tehničko rešenje, decembar 2010.						
10.	A. Juhas, N. Pekarić-Nađ, D. Herceg, "Estimation of Human Exposure to Combined RF EM Field of Multiple Antennas,"  Proceedings of International PhD Seminar on computational electromagnetics and optimization in electrical engineering – CEMOEE 2010, Sofia, Bulgaria, 10-13 Sep., 2010, pp. 27-31, ISBN 978-954-438-856-0							
Sur	Summary data for teacher's scientific or art and professional activity:							
Quot	tation total :	5						
Tota	l of SCI(SSCI) list papers :	3						

International:

Domestic:

Strana 251 Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Katić A. Vladimir					
Academic title:			Full Professor					
		titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad 01.10.1978			
	starting date:							
	Scientific or art field:					Power Electronics, Machines and Facilities		
1.00.0	lemic carie		Year	Institution			Field	
	lemic title e	lection:	2002	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
	thesis		1991	School of Electrical Eng			Electrical and Computer Engineering	
	ster thesis		1981	School of Electrical Engi			Electrical and Computer Engineering	
	elor's thesis		1978	Faculty of Technical Sci			Electrical and Computer Engineering	
LIST	of courses b	eing ne	id by the te	acher in the accredited stu	udy programme	es I		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EE305	Power	Electronics	s 1		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE308	Power	Electronics	3 2		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	7407	Electri	ool Engine	oring Environment and De	ataatian	` ′	ety at Work, Undergraduate Academic Studies	
3.	Z107	Electri	cai Enginee	ering, Environment and Pr	otection	Studies	ronmental Engineering, Undergraduate Academic	
4.	EE0406	Electri	c Power Qu	uality		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EE431	Renew	able Sourc	es and Small Power Plan	ts		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EZ300	Clean Electrical Energy Sources				( ZC0) Clean	an Energy Technologies, Undergraduate Studies	
7.	EZ400	Clean Energy Sources Design				( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
8.	DE209S	Energy Converters in Renewable Energy So			ources		ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	DE413S	Integration of Distributed Energy Resources			5		ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	DE505S	Power	Quality in I	Distribution Networks			ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	DE506S	Renew	able Electr	ical Energy Sources			ver, Electronic and Telecommunication g, Specialised Academic Studies	
12.	DE509S	Effects Enviro		Converters on Network an	d		ver, Electronic and Telecommunication g, Specialised Academic Studies	
13.	EE406	Electri	c Power Qı	uality			er, Electronic and Telecommunication g, Master Academic Studies	
14.	EE509	Marke	t and Dereg	gulation in Electric Power I	Industry	Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies	
15.	S0I51Ž	Electri	cal Substat	ion and Electric Traction		( S00) Traf Studies	ffic and Transport Engineering, Master Academic	
16.	EE544	Renew	able energ	y sources			er, Electronic and Telecommunication g, Master Academic Studies	
17.	EE564	Distrib	uted Energ	y Resources			er, Electronic and Telecommunication g, Master Academic Studies	
18.	ZCM02	Clean	technologie	es for electrical vehicles		( ZC0) Clea Studies	an Energy Technologies, Master Academic	
19.	ZCM08	Renew	vable and D	Distributed Electrical Energ	gy Sources	( ZC0) Clea	an Energy Technologies, Master Academic	
20.	DE108	FACTS Devices and Electric Power Quality			,		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
21.	DE113	Applica	ation of Pov	wer Electronics in Power S	Systems		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
22.	DE209	Energy	/ Converter	s in Renewable Power Sc	ources		ver, Electronic and Telecommunication g, Doctoral Academic Studies	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes							
	ID	Course name		Study programme name, study type			
23.	DE413	Integration of Distributed Energy Re	sources	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
24.	DE505	Power Quality in Distribution Networ	ks	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
25.	DE506	Renewable Electrical Energy Source	es	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
26.	DE509	Effects of Power Converters on Netv Environment	vork and	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
				( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
				( E20) Computing and Control Engineering, Doctoral Academic Studies			
				( F00) Graphic Engineering and Design, Doctoral Academic Studies			
	SID04			( F20) Engineering Animation, Doctoral Academic Studies			
				( G00) Civil Engineering, Doctoral Academic Studies			
27.		Current State in the Field		( GI0) Geodesy and Geomatics, Doctoral Academic Studies			
21.				( H00) Mechatronics, Doctoral Academic Studies			
				( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies			
				( M00) Mechanical Engineering, Doctoral Academic Studies			
				( OM1) Mathematics in Engineering, Doctoral Academic Studies			
				(S00) Traffic Engineering, Doctoral Academic Studies			
				( Z00) Environmental Engineering, Doctoral Academic Studies			
28.	MSID04	Present State in the Field		( M40) Technical Mechanics, Doctoral Academic Studies			
				( A00) Architecture, Doctoral Academic Studies			
29.	SID04	Present State in the Field		( AS0) Scenic Design, Doctoral Academic Studies			
				( Z01) Safety at Work, Doctoral Academic Studies			
Rep		e refferences (minimum 5, not more th	,				
1.		Katić: "Kvalitet električne energije – vi nauke - Monografije, Br. 6, Novi Sad		tet u Novom Sadu - Fakultet tehničkih nauka, Edicija 9-57-2.			
2.				niverzitet u Novom Sadu-Fakultet tehničkih nauka, Edicija , strana 430, Pomoćni udžbenik, ISBN 86-499-0017-8.			
3.	Sadu-Fal			nika – Praktikum laboratorijskih vežbi", Univerzitet u Novom 24, Novi Sad, 2000, tiraž 300 primeraka, strana 85, Pomoćni			
4.	u Novom		a: Tehničke nauke - U	ora u energetici – Praktikum laboratorijskih vežbi", Univerzitet džbenici, Broj 149, Novi Sad, Dec. 2006, tiraž 300 primeraka,			
5.	Vladimir l str.175, S		račima", Fakultet tehn	ičkih nauka – WUS, Novi Sad, 2006, tiraž 20 primeraka,			
6.				ns Compensation with Universal Power Quality Conditioning 7, Vol.22, No.2, April 2007, pp.968-976.			
7.				ed Comparison of the Methods for AC/DC Converter A, ISSN 0278-0046, Vol.50, No.6, December 2003, pp.1100-			
8.		Katić, Dušan Graovac: "A Method for ion on Power Electronics, USA, ISSN		de Filter Optimization in Transient and Steady States", IEEE 0.3, May 2002, pp.342-352.			
9.		raovac, Vladimir Katić: "On-Line Conti nsaction on Industrial Electronics, US		Type Active Rectifier Using Transfer Function Approach", ol.48, No.3, June 2001, pp.526-535.			
10.		Katić: "Modern Power Electronics Tec H-R.Srpska), Vol.10, No.2, Dec.2006,	-	wer Plants", Invited Paper, Electronics/Elektronika, Banja op.3-9.			
Sur	nmary data	for teacher's scientific or art and profe	essional activity:				
	ation total:		122				
Tota	of SCI(SS	CI) list papers :	19				

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Current projects : Domestic : 5 International : 1

## ASTRONOM STREET

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

			Katić M. Marina						
Academic title:					Lecturer				
Name of the institution where the teacher works full time and F				acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad		
starting date:					01.10.2001	01.10.2001			
					English				
Acad	lemic carie	er	Year	Institution			Field		
Acad	lemic title e	lection:	2010	Faculty of Technical Sci	ences - Novi Sa	ad	English		
Mast	er's thesis		2009	Faculty of Philology - Be	ograd		English		
Magi	ster thesis		2006	Faculty of Philology - Be	ograd		Engineering Management		
Bach	elor's thesi	S	1987	Faculty of Philosophy - N	Novi Sad		English		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	AEJ1L	Englisl	h Language	e - Elementary		( A00) Arch	hitecture, Undergraduate Academic Studies		
2.	AEJ2L	Englisl	n Language	intermediate		( A00) Arch	hitecture, Undergraduate Academic Studies		
3.	AEJ2Z	Englisl	n intermedia	ate		( A00) Architecture, Undergraduate Academic Studies			
4.	AEJ3Z	Englisl	h Language	e - upper intermediate		( A00) Architecture, Undergraduate Academic Studies			
						( G00) Civil Engineering, Undergraduate Academic Studies			
	EJ01L	English Language – Elementary				( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies     ( M30) Energy and Process Engineering, Undergraduate Academic Studies     ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies			
5.									
						( P00) Production Engineering, Undergraduate Academic Studies			
						( S00) Traffic and Transport Engineering, Undergraduate Academic Studies			
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
							ver, Electronic and Telecommunication g, Undergraduate Academic Studies		
						(F00) Graphic Engineering and Design, Undergraduate Academic Studies			
							asurement and Control Engineering, luate Academic Studies		
6.	EJ01Z	Englisl	h Language	e - Elementary		( Z01) Safe	ety at Work, Undergraduate Academic Studies		
							( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
							aster Risk Management and Fire Safety, uate Academic Studies		
						(Z20) Envi	ronmental Engineering, Undergraduate Academic		

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	of courses b	eing held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type					
			( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies					
7.	EJ02L	English Language – Pre-Intermediate	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies					
			( Z01) Safety at Work, Undergraduate Academic Studies					
			( ZC0) Clean Energy Technologies, Undergraduate Academic Studies					
			( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( I10) Industrial Engineering, Undergraduate Academic Studies					
8.	EJ02Z	English Language - Dra Intermediate	( I20) Engineering Management, Undergraduate Academic Studies					
0.		English Language – Pre-Intermediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies					
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies					
	EJ03Z		( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies					
9.		English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies					
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( Z01) Safety at Work, Undergraduate Academic Studies					
10.	EJ04L	English Language – Upper Intermediate	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( ES0) Power Software Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
11.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
			(AH0) Architecture, Master Academic Studies					

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	ist of courses being held by the teacher in the accredited study programmes					
	ID	Course name	Study programme name, study type			
			( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
12.	EJ2L	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies			
			( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( ES0) Power Software Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
13.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies			
			(AH0) Architecture, Master Academic Studies			
	EJ3L		( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
14.		English Language – Advanced	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies			
15.	EJE5	English Language – First Certificat 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
16.	EJE6	English Language - First Certificate 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
17.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies			
18.	EJEI1	English in Engineering 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
19.	EJEI2	English in Engineering 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
20.	EJF5	English Language for GRID 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
21.	EJF6	English Language for GRID 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
22.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies			
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies			
23.	EJM	English Language – ESP Course	( M30) Energy and Process Engineering, Undergraduate Academic Studies			
20.	EJM	English Earlyaags – Eor Ooulse	( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies			
			( P00) Production Engineering, Undergraduate Academic Studies			
24.	EJPST	English Language in Postal Traffic	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
25.	EJSIT	English Language in Traffic and Transport	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies			

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#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	of courses b	peing held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type					
26.	EJZ	English Language - Specialized	(Z20) Environmental Engineering, Undergraduate Academic Studies					
27.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
28.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
29.	ISIT01	English Language 1	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies					
30.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies					
31.	ASI431	English Language 2	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies					
32.	BMI80	English 1	( BM0) Biomedical Engineering, Undergraduate Academic Studies					
33.	BMI81	English 2	( BM0) Biomedical Engineering, Undergraduate Academic Studies					
34.	EJIIM	English for Specific Purposes	( I10) Industrial Engineering, Undergraduate Academic Studies					
34.	LJIIIVI	English for Specific Fullposes	( I20) Engineering Management, Undergraduate Academic Studies					
35.	ETI10	English Language-Lower	( E02) Electronics and Telecommunications, Undergraduate Professional Studies					
36.	SSIP21	English Language	( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies					
	EJ1Z		( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( ES0) Power Software Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
37.		English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
			(AH0) Architecture, Master Academic Studies					
			( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( ES0) Power Software Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
38.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
			(AH0) Architecture, Master Academic Studies					
39.	eja	English Language – a Specialized Course	(AH0) Architecture, Master Academic Studies					
40.	EJE7	English Language - Advanced	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies					
41.	F507	English Language for GRID 3	( F00) Graphic Engineering and Design, Master Academic Studies					
42.	NIT03	Business English	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies					
Rep	Representative refferences (minimum 5, not more than 10)							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)						
1.	Marina Katić, Kostadin Pušara, "Standardization of E-Commerce Terminology", Annals of the Faculty of Engineering Hunedoara Vol.III, Part 2, 2005, ISSN 1584-2665, Edition Mirton, Timisoara (Romania), pp.31-36.						
2.	M.Katić, "O tehnikama prevođenja nekih engleskih termina energetske elektronike", 11th International Symposium on Power Electronics – Ee 2001, Novi Sad, OctNov.2001, pp.154-157.						
3.	M.Katić, "Terminology of E-Commerce", 7th International Symposium on Interdisciplinary Regional Research – ISIRR 2003, Hunedoara (Romania), Sept. 2003, CD-ROM – Paper 0104.						
4.	M.Katić, "Key Terms of Business Environment" 2003, .	", PSU-UNS Int. Confe	rence Energy and	d Environment, Hat Yai (Thai	land), Dec.		
5.	Marina Katić, Kostadin Pušara, "Need for E-Commerce Term Standardization and Harmonization", Western Business & Management Conference 2004, Las Vegas (USA), Oct.2004, CD ROM.						
6.	Marina Katić, Kostadin Pušara, "Standardizatic Regional Research - ISSIR 2005, Szeged (Hur				terdisciplinary		
7.	M.Katić, "Deregulacija u elektroprivredi sa asp savetovanje o elektrodistributivnim mrežama, CD ROM).						
8.	M.Katić, "Engleski jezik u službi međunarodnog Vrnjačka Banja, Nov. 2002, pp.146-151	g menadžmenta", XII r	neđunarodna kon	ferencija Industrijski sistemi	– IS 2002,		
9.	M.Katić, "Anglicizmi u jeziku tehnike", XLVII Ko 244.	onferencija ETRAN, He	rceg Novi, Jun 20	003, CD-ROM i knjiga, Svesl	ка 3, рр. 241-		
10.	M.Katić, K.Pušara, "Zašto je potrebna standardizacija termina elektronske trgovine", XLIX Konferencija za ETRAN, Budva, 0510. 06. 2005., Zbornik radova, CD-ROM i knjiga, Sveska 3, pp.238-241.						
Sur	Summary data for teacher's scientific or art and professional activity:						
Quot	ration total :	0					
Total of SCI(SSCI) list papers: 0							
Current projects : Domestic : 0 International : 0							

## SE SC E

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Katić A. Nenad			
Academic title:					Assistant Pro			
Nam	e of the inst	titution v	vhere the te	acher works full time and	-			
	starting date:							
	ntific or art f				Electroenerge	etics		
	emic caries		Year	Institution			Field	
	emic title el	lection:	2008	Faculty of Technical Sci			Electroenergetics	
	thesis		2002	Faculty of Technical Sci			Electroenergetics	
Ť	ster thesis elor's thesis		1991 1982	School of Electrical Engi			Electroenergetics	
				Faculty of Technical Sci acher in the accredited stu			Electroenergetics	
LIST	i courses b	ellig lie	id by the tea	acrier in the accredited sit	ady programme	:5		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EOS35	Tržište	električne	energije		Energy, Ur	ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies	
2.	EE0406	Electri	c Power Qu	ality		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	ESI006	Introdu	uction to crit	tical mission software for p	power grids	Academic		
4.	ESI012	Smart	Grid Netwo	orks		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
5.	EZ301	Cost-e	effective and	d energy-efficient electrica	ll systems	( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
6.	DE107S	Decision	on-Making (	Optimization		( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
7.	DE312S	Power	Market and	d Regulation		(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
8.	DE405S	Smart Grid Networks				( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
9.	DE406S	Electric Power Industry in the Free Market E			Economy	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
10.	DE508S	Power	System Ec	conomics			ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EE406	Electri	c Power Qu	ıality			er, Electronic and Telecommunication g, Master Academic Studies	
12.	EE509	Marke	t and Dereg	gulation in Electric Power I	Industry		er, Electronic and Telecommunication g, Master Academic Studies	
13.	EE510	Econo	mic Method	ls in Electric Power Indust	try		er, Electronic and Telecommunication g, Master Academic Studies	
14.	EE544	Renew	vable energ	y sources		Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies	
15.	ZCM02	Clean	technologie	es for electrical vehicles		Studies	an Energy Technologies, Master Academic	
16.	ZCM05	Electri	c Power Ma	arket		( ZC0) Clea Studies	an Energy Technologies, Master Academic	
17.	ZCM08	Renew	vable and D	istributed Electrical Energ	gy Sources	( ZC0) Clea Studies	an Energy Technologies, Master Academic	
18.	DE107	DE107 Decision-Making and Optimization			Èngineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies thematics in Engineering, Doctoral Academic		
					Studies	ver, Electronic and Telecommunication		
19.	DE312	Electricity Markets and Regulation			Engineerin	g, Doctoral Academic Studies		
20.	DE405	Smart Grid Networks				Èngineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
21.	DE406	Electric Power Industry in the Free Market			Economy	' '	ver, Electronic and Telecommunication g, Doctoral Academic Studies	

## TE STUDIO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	of courses being held by the teacher in the accredited study programmes							
ID		Course name		Study programme name, study				
22.	DE508	Power System Economics		, ,	ectronic and Telecommunica ctoral Academic Studies	ation		
Rep	Representative refferences (minimum 5, not more than 10)							
1.		Savić M.: Autori: Nenad Katic, Milan ing protection , IEE ProcGener.Trar			optimisation of overhead po	wer distribution		
2.		Dumnić B., Katić N., Milićević D., Gra International Scientific Journal, 2012			ve of Wind Energy in Vojvod	ina, Thermal		
3.		V., Katić N., Janjić D.: Voltage Conf n, 2001, No 60, pp. 85-97	trol Integrated in Distrib	oution Manageme	nt System, Electrical Power	System		
4.	Katić N.: pp. 30-35	Yugoslavia Develops a New Distribu	tion Management Syst	em , Utility Autor	nation, USA, a PennWell Pu	blication, 1996,		
5.	Katić V., Dumnić B., Čorba Z., Milićević D., Katić N.: Potentials of Renewable Energy Market in Serbia – Case of Wind and Solar Energy, 8. IEEE International Conference on European Energy Market – EEM, Zagreb, 25-27 Maj, 2011, pp. 785-790, ISBN 978-1-61284-284-4							
6.	,	Marijanović V., Stefani I.: Smart Grid ce on Electricity Distribution ICED, Na			st Benefit Analysis, 4. China	International		
7.	Conferen	PROFITABILITY OF SMART GRID S ce and Exibition on Power Generation ar, 2010, pp. 1-6		-	JTION NETWORK, 7. Medite ergy Conversion, Agia Napa,			
8.	Katić N., Strezoski V., Popović D.: Business Benefits of DMS Software Application in Competitive Distribution, 17th International Conference on Electricity Distribution CIRED							
9.	Katić N., Strezoski V., Popović D.: DMS Software Applications a Powerful Tool for the New Challenges in Deregulated Power Distribution, Balkan Power Conference							
10.	Katić N.,	Strezoski V., Katić V.: Introducing th	e Management and E0	CTS in Electrical F	Power Engineering Education	n, ISIRR		
		for teacher's scientific or art and profe	,					
	ation total :		16					
		CI) list papers :	4					
Curre	urrent projects : Domestic : 3 International : 14							

## DE SC

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Konjović D. Zora			
Academic title:					Full Professor			
Name of the institution where the teacher works full time and				eacher works full time and	Faculty of Technical Sciences - Novi Sad			
starting date:					01.10.1981			
Scier	ntific or art f	ield:			Applied Comp	outer Scienc	e and Informatics	
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2003	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
PhD	thesis		1992	Faculty of Technical Sci	ences - Novi S	ad	Robotics and Flexible Automation	
Magi	ster thesis		1985	Faculty of Technical Science	ences - Novi S	ad	Robotics and Flexible Automation	
Bach	elor's thesi	S	1973	Faculty of Sciences - No	vi Sad		Mathematics	
List c	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						Studies	desy and Geomatics, Undergraduate Academic	
1.	E231	Nume	rical Algoritl	hms and Numerical Softwa	are	Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - ndergraduate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( E20) Computing and Control Engineering, Undergraduate Academic Studies		
		Internet Networks				( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
2.	E233						tware Engineering and Information Technologies, uate Academic Studies	
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
3.	E236A	Computational Intelligence Fundamentals				( SE0) Software Engineering and Information Technologies Undergraduate Academic Studies		
						( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
4.	E2K42	Knowledge Based Systems				( SE0) Software Engineering and Information Technologie Undergraduate Academic Studies		
						Loznica, U	tware Engineering and Information Technologies - ndergraduate Academic Studies	
5.	ISIT41	eGove	ernment tecl	hnologies and systems			vare and Information Technologies (Inđija), uate Professional Studies	
6.	BMI101	Introdu	uction to Me	edical Informatics		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
7.	SES103	Oral a	nd written c	communication skills		Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
	223100	O.G. G		STuriodatori ottiio		( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
8.	8. SES301 IT Law				Undergrad	tware Engineering and Information Technologies, uate Academic Studies		
O. GLOGOT IT LAW				( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				

## SITAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( E20) Computing and Control Engineering, Master Academic Studies				
9.	E2513	Semantic Web	( PM0) Production Engineering, Master Academic Studies				
			( SE0) Software Engineering and Information Technologies, Master Academic Studies				
			( E20) Computing and Control Engineering, Master Academic Studies				
10.	E2514	Biologicaly inspired computing	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
			( I20) Engineering Management, Specialised Professional Studies				
11.	EP002	EBusiness technologies and systems	( IB0) Engineering Management - MBA, Specialised Professional Studies				
			( E20) Computing and Control Engineering, Master Academic Studies				
12.	E2525	Contemporary educational technologies and standards	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
13.	SEM013	E-government technologies	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
14.	DAU002	Selected Chapters in Computing	( F00) Graphic Engineering and Design, Doctoral Academic Studies				
			( H00) Mechatronics, Doctoral Academic Studies				
1 45	DRNI07	Only the distribution in Community is and Justillian and	( E20) Computing and Control Engineering, Doctoral Academic Studies				
15.		Selected Chapters in Computational Intelligence	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
16.	FDS152	Selected Topics in Computer Graphics	( F00) Graphic Engineering and Design, Doctoral Academic Studies				
17.	DAU014	Selected Topics in Computing	( E20) Computing and Control Engineering, Doctoral Academic Studies				
.,,	<i>B</i> /( <b>0</b> 014	Colosica Topics in Companing	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
18.	DRNI10	Selected Topics in E-Government	( E20) Computing and Control Engineering, Doctoral Academic Studies				
			( E20) Computing and Control Engineering, Doctoral Academic Studies				
19.	DRNI17	Selected Topics in ICT enhanced learning	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
Rep	oresentative	refferences (minimum 5, not more than 10)					
1.		c Djordje, Konjovic Zora, Pap Endre, Ralevic Nebojsa (201˚ ts and Systems, Vol. 170 no. 1, pp. 76-94	1). The maximal distance between imprecise point objects,				
2.		c Djordje, Konjovic Zora, Pap Endre, Rudas Imre (2012). Li stems (rad objavljen u elektronskom obliku http://www.scie	near Fuzzy Space Based Road Lane Detection. Knowledge- ncedirect.com/science/article/pii/S0950705112000032)				
3.		c Aleksandar, Konjović Zora, Milosavljević Branko, Nenac ons: A case study in automatic terminology recognition, Com					
4.		Stevan, Sladić Goran, Milosavljević Branko, Konjović Zora ( ent Services. Journal of Organizational Computing and Elec					
5.		oran, Milosavljević Branko, Surla Dušan, Konjović Zora (201 c Library (ISSN: 0264-0473), 30:5, pp. 623-652	2). Flexible Access Control Framework for MARC Records.				
6.		ran, Segedinac Milan, Konjović, Zora (2012).Automatic Ger nal Design. Computer Science and Information Systems. Vo					
7.		oran, Milosavljević Branko, Konjović Zora, Vidaković Milan ( ns. Computer Science and Information Systems / ComSIS (					
8.		Dragan, Surla Dusan, Konjovic Zora (2011). CERIF compat /ol. 29 no. 1, pp. 52-70	ible data model based on MARC 21 format, Electronic				
9.		c Aleksandar, Ivanovic Dragan, Milosavljevic Branko, Kor from scientific publications for CRIS systems, Program-Ele					

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

10. Segedinac, Milan, Konjović, Zora, Segedinac Mirjana, Savić, Goran (2011). A Formal Approach to Organization of Educational Objectives. Psihologija, Vol. 44 no. 4, pp. 307-323.

Summary data for teacher's scientific or art and professional activity:					
Quotation total :	0				

Total of SCI(SSCI) list papers :	15					
Current projects :	Domestic :	2	International:	1		

## FACULTY C

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Kostić Z. Marko			
Academic title:					Associate Professor			
1				eacher works full time and	Faculty of Technical Sciences - Novi Sad			
					15.10.1999			
Scie	ntific or art f	ield:		Í	Mathematics			
Acad	demic caries	er	Year	Institution			Field	
Acad	lemic title e	lection:	2010	Faculty of Technical Sci	ences - Novi Sa	ad	Mathematics	
PhD	thesis		2004	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
Magi	ister thesis		2001	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
Bach	nelor's thesi	S	1999	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E121	Mathe	matical Ana	alysis 2		(E10) Powe Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	E135B	Mathe	matical Ana	alysis 2		Studies	desy and Geomatics, Undergraduate Academic	
						(E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
3.	E212	Mathematical Analysis 1				Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - ndergraduate Academic Studies	
4.	EOS07	Mathe	matics 2			( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies		
5.	F101	Mathe	matics			( F00) Graphic Engineering and Design, Undergraduate Academic Studies		
6.	GI107	Mathematical Analysis 1				( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
							chanization and Construction Engineering, uate Academic Studies	
7.	M106	Mathematics 2				( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
'	WITOO						hnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Production Engineering, Undergraduate Academic Studies		
8.	M4202	Applie	d Mathema	tical Analysis		( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
9.	ISIT06	Matem	natika 2				vare and Information Technologies (Inđija), uate Professional Studies	
10.	0M501	Functi	onal Analys	is		( OM1) Ma Studies	thematics in Engineering, Master Academic	
11.	0ML501	Functi	onal Analys	is		Studies	thematics in Engineering, Master Academic	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
12.	DZ01MS	Select	ed Chapter	s in Mathematics		( I22) Engii Studies	neering Management, Specialised Academic	
					( Z00) Environmental Engineering, Specialised Academic Studies			
13.	Z506	20BAc	Ivanced Co	urse in Mathematics 1		( ZP1) Disa Academic	aster Risk Management and Fire Safety, Master Studies	
						(Z20) Envi	ronmental Engineering, Master Academic Studies	
14.	Z506	Viši ku	irs matemat	tike 1(uneti naziv na engle	eskom)	(Z20) Environmental Engineering, Master Academic Studies		
15.	D0M01	1 Functional Analysis 1				( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	

## THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programi	me name, study type					
16.	D0M19	Functional Analysis 2		( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic				
			( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies							
				( E20) Computin Academic Studie	g and Control Engineering, les	Doctoral				
				( F00) Graphic E Studies	ngineering and Design, Doo	toral Academic				
	DZ01M			(F20) Engineerii	ng Animation, Doctoral Acad	demic Studies				
				( G00) Civil Engi	neering, Doctoral Academic	Studies				
				(GI0) Geodesy a	and Geomatics, Doctoral Ac	ademic Studies				
17.		Selected Chapters in Mathematics		( H00) Mechatro	nics, Doctoral Academic Stu	idies				
17.		Selected Chapters in Mathematics		( I20) Industrial E Doctoral Acaden	Engineering / Engineering M nic Studies	anagement,				
				( M00) Mechanic	al Engineering, Doctoral Ac	ademic Studies				
				( M40) Technical	Mechanics, Doctoral Acade	emic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic				
				(S00) Traffic En	gineering, Doctoral Academ	ic Studies				
				( Z00) Environme Studies	ental Engineering, Doctoral	Academic				
				( Z01) Safety at Work, Doctoral Academic Studies						
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.	Kostić, M	larko, Distribution cosine functions. Ta	iwanese J. Math. 10 (2	2006), no. 3, 739-	-775.					
2.	Kostić M	larko,On analytic integrated semigrou	os. Novi Sad J. Math. 3	35 (2005), no. 1, ²	127135.					
3.	Kostić M (2003), 7	larko,Convoluted \$C\$-cosine function 592.	s and convoluted \$C\$-	semigroups. Bull	Cl. Sci. Math. Nat. Sci. Mat	h. No. 28				
4.	Kostić Ma	arko, On a class of quasi-distribution s	semigroups, Novi Sad	J. Math 36 (2), 13	7-152					
5.	M. Kostić	c, P. J. Miana, Relations between district Mathematics 11 (2007), 531543.				iiwanese				
6.		e, S. Pilipović, Global convoluted semi	groups, accepted in Ma	ath. Nachr.						
7.	M. Kostić	c, S. Pilipović: Convoluted C-cosine fu in J. Math. Anal. Appl.	· · · · · · · · · · · · · · · · · · ·		ultradistribution and hyperfu	nction sines,				
8.	M. Kostić	:: Complex powers of operators, acce	oted in Publications De	e"I Institute Mathe	matique					
9.		:: C-Distribution semigroups, Studia M			<u> </u>					
10.		:: Convoluted operator families and ab	. , , , ,		ragujevac Journal of Mathen	natics				
-		for teacher's scientific or art and profe			<u> </u>					
	ation total :	<u> </u>	32							
Tota	of SCI(SS	CI) list papers :	15							
	Current projects : Domestic : 1 International : 0									

## SECTION STUDIOS

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Kovačević M. Ilija				
Acad	lemic title:				Full Professor				
		titution v	vhere the te	acher works full time and	·				
	ng date:				01.09.1972				
	ntific or art f		v		Mathematics	Mathematics			
Academic carieer Year Institution							Field		
	lemic title e	lection:	1990	Faculty of Technical Sci		ad	Mathematics		
	thesis		1979	Faculty of Mathematics			Mathematical Sciences		
<b>─</b> Ŭ	ster thesis	_	1975	Faculty of Mathematics			Mathematical Sciences		
	elor's thesis		1971	Faculty of Sciences - No		-	Mathematical Sciences		
LIST	Courses D	eing ne	id by the tea	acher in the accredited stu	ady programme	1			
	ID	Course	e name			Study pro	gramme name, study type		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
1.	E212	Mathe	matical Ana	ılysis 1			tware Engineering and Information Technologies, uate Academic Studies		
							tware Engineering and Information Technologies - ndergraduate Academic Studies		
2.	EE204	Select	ed Chanter	s in Mathematics			asurement and Control Engineering, uate Academic Studies		
۷.	LLZOT	Selected Chapters in Mathematics					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
				haria 4		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
3.	E102	Matne	matical Ana	llysis 1		( MR0) Me Undergrad	asurement and Control Engineering, uate Academic Studies		
4.	E102A	Mathe	matical Ana	ılysis 1			ver, Electronic and Telecommunication g, Undergraduate Academic Studies		
5.	IM1423	Financ	cial Mathem	atics		(I20) Engin Studies	ngineering Management, Undergraduate Academic s		
6.	0M501	Function	onal Analys	is		( OM1) Ma Studies	M1) Mathematics in Engineering, Master Academic dies		
7.	0ML501	Function	onal Analys	is		( OM1) Ma Studies	) Mathematics in Engineering, Master Academic s		
						Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
						( I12) Indus	strial Engineering, Specialised Academic Studies		
8.	DZ01MS	Select	ed Chapters	s in Mathematics		( I22) Engi Studies	neering Management, Specialised Academic		
						( Z00) Env Studies	ironmental Engineering, Specialised Academic		
9.	1004/S	Statist	ical Ouantit	ative Methods		( I20) Engi Studies	neering Management, Specialised Professional		
9.	1004/3	Statist	car Quartiti	ative methods		( IB0) Engi Profession	neering Management - MBA, Specialised al Studies		
10.	GS012	Select	ed Chapter	s in Mathematics		( G10) Ene Studies	ergy Efficiency in Buildings, Specialised Academic		
11.	MPK001	Statist	ical and Nu	merical Methods			enjerstvo tretmana i zaštite voda - TEMPUS(uneti ngledskom), Master Academic Studies		
12.	SDOM3 0	Probal Experi		tics and Theory of Engine	ering	( Z00) Env Studies	ironmental Engineering, Specialised Academic		
13.	D0M01	Function	onal Analys	is 1		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		
14.	D0M19	Function	onal Analys	is 2		( OM1) Mathematics in Engineering, Doctoral Academic Studies			



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programi	ne name, study type			
	DOM30			( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
		Drahahility Statistics and Theory of	Engineering	( M40) Technical	Mechanics, Doctoral Acade	emic Studies		
15.		Probability, Statistics and Theory of Experiment	Engineering	( Z00) Environmental Engineering, Doctoral Academic Studies				
				( Z01) Safety at	Work, Doctoral Academic St	udies		
					ectronic and Telecommunica ctoral Academic Studies	ation		
	DZ01M			(E20) Computin Academic Studie	g and Control Engineering, I es	Doctoral		
				( F00) Graphic E Studies	ngineering and Design, Doc	toral Academic		
				(F20) Engineerii	ng Animation, Doctoral Acad	lemic Studies		
				(G00) Civil Engi	neering, Doctoral Academic	Studies		
				(GI0) Geodesy a	and Geomatics, Doctoral Ac	ademic Studies		
16.		Selected Chapters in Mathematics		( H00) Mechatro	nics, Doctoral Academic Stu	dies		
10.		Selected Chapters in Mathematics		( I20) Industrial E Doctoral Acaden	Engineering / Engineering Manic Studies	anagement,		
				( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
				( M40) Technical	Mechanics, Doctoral Acade	emic Studies		
				( OM1) Mathema Studies	atics in Engineering, Doctora	I Academic		
				( S00) Traffic En	gineering, Doctoral Academ	ic Studies		
				( Z00) Environme Studies	ental Engineering, Doctoral <i>i</i>	Academic		
				( Z01) Safety at V	Work, Doctoral Academic St	udies		
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
1.		vić, On alfa-Hausdorff subsets, almos and Applied mathematics 20 (4) 1989.		almost upper sei	micontinuous decomposition	, Indian Jurnal		
2.	N. Adžić, 299.	I. Kovačević, V. Marić, V. Ungar, Mat	ematička analiza 2, F1	N (Edicija tehnič	ke nauke-udžbenici), Novi S	Sad, 1996., 1-		
3.		ević, N. Ralević, Funkcionalna analiza 2004., 1-203.	FTN (Edicija tehničke	nauke-udžbenici	), Novi Sad, (Ponovljeno i do	ppunjeno		
4.		ević, N. Ralević, B.Carić,V.Marić,M.No eno i dopunjeno izdanje), FTN (Edicija				ocesi		
5.		vić, V.Marić, M.Novković, B.Carić, N.F alne jednačine (Ponovljeno i dopunje						
6.	I. Kovače	ević, Algebra, Naučna knjiga, Beograd	, 1990., 1-116.					
7.		vić, N.Ralević, V.MarićV.Ćurić, Integra l, 2012, 1-191	ali funkcija više promer	nljivih i teorija polja	a, FTN (Edicija tehničke na	uke-udžbenici),		
8.	I.Kovače	vić, Some properties of Mn subsets a	nd almost closed mapp	oings, Indian J.pui	re appl. Math., 27(9), 1996.,	875-881.		
9.		vić, On almost closed mapping, parac atics,25(9), 1994., 949-954.	ompactness and partia	al equivalence rela	atuions, Indian Journal of Pu	re and Applied		
10.	Kiurski J. the asses	., Oros I., Ralević N., Kovačević I., Adssement of fountain solution quality, Ca 1842-4090						
Sur		for teacher's scientific or art and profe	essional activity:					
	ation total:		28					
		CI) list papers :	7					
Current projects : Domestic : 3 International : 2								

## ASSTUDIO DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DE LA CONTRA DEL CONTRA DEL CONTRA DE LA CONTRA DE LA

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Kovačević V. Jelena						
Acad	lemic title:				Assistant Professor				
		titution v	vhere the te	acher works full time and					
	ng date:				01.12.1999				
	ntific or art f				Computer Engineering and Computer Communication				
Acad	Academic carieer Year Institution						Field		
Acad	lemic title e	lection:	2011	Faculty of Technical Sci	ences - Novi S	ad	Computer Engineering and Computer Communication		
PhD	thesis		2010				Computer Engineering and Computer Communication		
PhD	thesis		2010	Faculty of Technical Sci	ences - Novi S	ad	Computer Engineering and Computer Communication		
Magi	ster thesis		2003	Faculty of Technical Sci	ences - Novi S	ad	Computer Engineering and Computer Communication		
Bach	elor's thesi	s	1997	Faculty of Technical Sci	ences - Novi S	ad	Computer Engineering and Computer Communication		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
1	RT44	DSP Architecture and Algorithms 1				( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
1.	K144					( SE0) Software Engineering and Information Technologie Undergraduate Academic Studies			
							tware Engineering and Information Technologies - Indergraduate Academic Studies		
		DSP Architecture and Algorithms 2				( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
2	RT46						asurement and Control Engineering, luate Academic Studies		
2.	K140	חסף א	JSP Architecture and Algorithms 2				tware Engineering and Information Technologies, luate Academic Studies		
							tware Engineering and Information Technologies - Indergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
3.	RT52	Dedica	ated Compu	iter Structure Design 2		( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
							tware Engineering and Information Technologies, luate Academic Studies		
4.	IGB340	Funda	mentals of	Engineering Animation		( F10) Eng Studies	ineering Animation, Undergraduate Academic		
5.	EK465	Archite	ectures of d	igital signal processors			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
			_			( E20) Con Academic	nputing and Control Engineering, Master Studies		
6	DTEA	Doo! T	Timo Sustan	n Dooign		( MR0) Me Academic	asurement and Control Engineering, Master Studies		
6.	RT59	redi- i	ime Systen	n pesign			tware Engineering and Information Technologies, ademic Studies		
							er, Electronic and Telecommunication g, Master Academic Studies		
	DTC44	Practio	cum in com	puter engineering and con	nputer	( E20) Con Academic	nputing and Control Engineering, Master Studies		
7.	RT511		unications		· 		Software Engineering and Information Technologies, Academic Studies		
8.	DRT06	Select	ed chapters	s on DSP systems		( E20) Con Academic	nputing and Control Engineering, Doctoral		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)								
1.	Kovacevic Jelena, Samardzija Dragan, Temeri networks", IEEE TRANSACTIONS ON CONSU (M22)								
2.	Kovacevic Jelena, Samardzija Dragan, Temeri Range Wireless Networks", International Confe IEEE Consumer Electronic Society, 2009.								
3.	Simic Dragan, Lukac Zeljko, Stefanovic Dejan, Kovacevic Jelena, Babic-Zdravkovic Sanja, "Real-time implementation of waveform interpolative voice codec with aspect to very low bit-rates" MIPRO - International convention on information and communication technology, electronics and microelectronics, Croatian Society For Microprocessor Systems And Information Systems, Microelectronics And Electronics, ISBN: 953-233-003-8, 2004.								
4.	Jovanovic Marija, Kovacevic Jelena, "Partitioning DSP Applications on a Multi-core Architecture Based on Load Balancing", IEEE Eastern European Conference on the Engineering of Computer Based Systems, Str: 154 – 155, ISBN: 978-1-4244-4677-3, Izdavac: IEEE, 2009.								
5.	Jovanovic Marija, Sajic Dejan, Kovacevic Jelena, "Optimization of lossless audio decoders on a class of embedded systems with two cores", International Conference on Digital Signal Processing, str. 1-6, ISBN: 978-1-4244-3297-4, Izdavac: IEEE, 2009.								
6.	Popovic Miroslav, Basicevic Ilija, Velikic Ivan, Kovacevic Jelena, "A Model-Based Statistical Usage Testing of Communication								
7.	Popovic Miroslav, Kovacevic Jelena, "A Statist Conference and Workshop on Engineering of C 2007.								
8.	Djukic Miodrag, Četic Nenad, Kovačević Jelena DSP Applications on a Class of Embedded Sys				enting Audio				
9.	Gajic Marko, Kovacevic Jelena, Petrovic Djord								
10.	Gajic Marko, Kovacevic Jelena, Djukic Miodrag, Peckai-Kovac Robert, "Using a Simple Algorithm in SPP for Audio Quality  10. Improvement Checkout" 19th Telecommunications forum TELFOR 2011, Serbia, Belgrade, November 22-24, 2011. Vol., Nr., Str.1115-1118, ISBN:978-1-4577-1498-6, ISSN:CFP1198P-CDR, Izdavac: Društvo za telekomunikacije – TELFOR								
Sur	nmary data for teacher's scientific or art and profe	essional activity:	_						
Quot	ation total :	0							
Total	of SCI(SSCI) list papers :	0							
Curre	ent projects :	Domestic :	0	International:	0				



Datum: 18.12.2012

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Kozmidis-Luburić F. Uranija									
	Academic title:					Full Professor			
		itution v	vhere the to	eacher works full time and					
	ng date:	itution v	viicie liie le	eacher works full tittle affu	01.09.1975				
	ntific or art f	ield:			Physics				
Academic carieer Year Institution					Field				
Acad	emic title el	ection:	2000	Faculty of Technical Sci	ences - Novi S	ad	Physics		
PhD 1	thesis		1988	Faculty of Sciences - No	ovi Sad		Physical Science		
Magis	ster thesis		1986	Faculty of Physics - Beo	grad		Physical Science		
Bachelor's thesis 1974 Faculty of Sciences - N					ovi Sad		Physical Science		
List of courses being held by the teacher in the accredited stu					udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	E103	Physic	·e				ver, Electronic and Telecommunication g, Undergraduate Academic Studies		
	L 103	Tilysic				Ùndergrad	asurement and Control Engineering, uate Academic Studies		
2.	EOS06	Physic	s			Energy, Ur	ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies		
3.	S014	Physic	s			Academic			
		,				Ùndergrad	Postal Traffic and Telecommunications, ergraduate Academic Studies		
4.	A401	Archite	ectural Phy	sics			hitecture, Undergraduate Academic Studies		
						Engineerin	ver, Electronic and Telecommunication ig, Specialised Academic Studies strial Engineering, Specialised Academic Studies		
5.	DZ01FS	Selected Chapters in Physics				( I22) Engineering Management, Specialised Academic Studies			
						( Z00) Env Studies	ironmental Engineering, Specialised Academic		
							ver, Electronic and Telecommunication ig, Doctoral Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Doctoral Studies		
						( F00) Gra Studies	phic Engineering and Design, Doctoral Academic		
						( G00) Civil Engineering, Doctoral Academic Studies			
						( GI0) Geo	desy and Geomatics, Doctoral Academic Studies		
						( H00) Mechatronics, Doctoral Academic Studies			
6.	DZ01F	Select	ed Chapter	rs in Physics		( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies			
						( M00) Me	chanical Engineering, Doctoral Academic Studies		
						( M40) Ted	chnical Mechanics, Doctoral Academic Studies		
						( OM1) Mathematics in Engineering, Doctoral Academi Studies			
						( S00) Traf	ffic Engineering, Doctoral Academic Studies		
						( Z00) Env Studies	ironmental Engineering, Doctoral Academic		
						( Z01) Safe	ety at Work, Doctoral Academic Studies		
Rep	resentative	reffere	nces (minir	mum 5, not more than 10)					
1.	U.F.Kozn	nidis-Lu	burić and E	,	OPTICAL EFFE	ECTS AND	THE DIELECTRIC PROPERTIES OF		
					d B.S.Tosić "C	OMBINED F	EFFECT OF EXCITION-EXCITION AND		
2.							S", Can. J. Phys. 60, 1838(1982)		

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#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



=119.110011119									
Re	Representative refferences (minimum 5, not more than 10)								
3.	U.F. Kozmidis-Luburić and B.S. Tošić, "KINEN Physica A 153, 266(1988)	IATICAL INTERACTIO	N OF OPTICAL I	EXCITATION AND COI	NSEQUENCES",				
4.	LJ. Budinski-Petković and U.Kozmidis-Luburić, "J AMING CONFIGURATIONS FOR IRREVERSIBLE DEPOSITION ON A SQUARE LATTICE", Psysica A 236, 211(1997)								
5.	Lj. Budinski-Petković and U. Kozmidis-Luburić, "RANDOM SEQUENTIAL ADSORPTION ON A TRIANGULAR LATTICE", Psysical Review E 56, 6904(1997)								
6.	V.Sajfert,B.S.Tošić,M.Marinković and U.F.KOZMIDIS-LUBURIĆ,"SURFACE DEFORMATION IN FILMS AND EXCITON CONCETRATION", Physica A 166, 430(1990)								
7.	B.S.Tošić, Lj.Mašković, U. F. KOZMIDIS-LUBURIĆ, V.Jovovic and G. Davidovic, "Transition FROM THE DEFORMED STRUCTURE TO THE STATISTICALLY EQUIVALENT IDEAL STRUCTURE AND AN ESTIMATE OF THE BASIS PHYSICAL CHARACTERISTICS OF THE DEFORMED STRUCTURE", Physica A 216, 478(1995)								
8.	V.Jovović, G.Davidović, B.S.Tošić,Lj.Mašković HETEROGENEOUS STRUCTURES", Physica		JRIĆ and D.Ćirić,	"MASS DISTRIBUTION	N IN				
9.	Lj. Budinski-Petković and U. KOZMIDIS-LUBU SEGMENTS ON A SQUARE LATTICE", Physi		DEPOSITION O	N DISORDERED SUB	STRATES: LINE				
10.	Li Budinski Potković and LI KOZMINIS I LIBITIPIĆ "IDDEVEDSIDI E DEDOSITION OF DIDECTED SELE AVOIDING DANDOM								
Sui	mmary data for teacher's scientific or art and prof	essional activity:							
Quo	tation total :	68							
Tota	l of SCI(SSCI) list papers :	23							
Curr	ent projects ·	1	International ·	0					

## ASTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Kozmidis-Petrović F. Ana					
Acad	lemic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				01.09.1975			
Scier	Scientific or art field:			Physics				
Acad	Academic carieer Year Institution					Field		
Acad	lemic title e	lection:	1997	Faculty of Technical Scient	ences - Novi Sa	ad	Physics	
PhD	thesis		1984	Faculty of Sciences - No	vi Sad		Physics	
Magi	ster thesis		1980	Faculty of Mathematics	- Beograd		Physical Science	
Bach	elor's thesi	S	1972	Faculty of Sciences - No	vi Sad		Physical Science	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E103	Physics				` '	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
1.	L 103	Physics				( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
2.	GG06	Civil Engineering Physics				(G00) Civi	l Engineering, Undergraduate Academic Studies	
		Technical Physics					chanization and Construction Engineering, uate Academic Studies	
						( M30) Energy and Process Engineering, Undergraduate Academic Studies ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
3.	M101							
						( P00) Production Engineering, Undergraduate Academi Studies		
						( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies		
4.	ZR440	Influen	ce of radiat	ion on health and occupa	tional safety	( Z01) Safe	ety at Work, Undergraduate Academic Studies	
5.	ZC008	Techn	ical physics			( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
6.	DZ01FS	Select	ed Chapters	s in Physics		( I22) Engii Studies	neering Management, Specialised Academic	
					( Z00) Envi	ironmental Engineering, Specialised Academic		
7.	SZD017	Solid N	/laterials in	the Environment		( Z00) Envi	ironmental Engineering, Specialised Academic	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List c	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programm	me name, study type					
					ectronic and Telecommunic ctoral Academic Studies	ation				
				(E20) Computin Academic Studie	g and Control Engineering, les	Doctoral				
				( F00) Graphic E Studies	ngineering and Design, Doo	ctoral Academic				
				( G00) Civil Engi	neering, Doctoral Academic	Studies				
				(GI0) Geodesy a	and Geomatics, Doctoral Ac	ademic Studies				
				( H00) Mechatro	nics, Doctoral Academic Stu	ıdies				
8.	DZ01F	Selected Chapters in Physics		( I20) Industrial E Doctoral Acaden	Engineering / Engineering M nic Studies	anagement,				
				( M00) Mechanic	al Engineering, Doctoral Ac	ademic Studies				
				( M40) Technical	Mechanics, Doctoral Acade	emic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic				
				( S00) Traffic En	gineering, Doctoral Academ	ic Studies				
				( Z00) Environmo Studies	ental Engineering, Doctoral	Academic				
				( Z01) Safety at Work, Doctoral Academic Studies						
9.	FDS141	Selected Chapters in Colour Manage	ement	( F00) Graphic E Studies	ngineering and Design, Doo	ctoral Academic				
10.	ZD017	Solid Materials in the Environment		( Z00) Environme Studies	ental Engineering, Doctoral	Academic				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.		trović, A. F. Petrović, V. M. Leovac, S. osemicarbazone, Journal of Thermal			(II) complexes with salicylad	dehyde S-				
2.		ć, D. M. Petrović, A. F. Petrović, F. Sk Journal of Materials Science Lett., 15,		Tendency towards	s crystallization of Ge-As-Te	system				
3.		rović, S. R. Lukić, D. M. Petrović, E. Z decomposition of Cobalt(II) complexe:								
4.		cić, D. M. Petrović, A. F. Petrović: Effe 41, 74-77, 1998.	ct of copper on conduc	ctivity of amorpho	us AsSeylz, Journal of Non-	Crystalline				
5.	Ligands.	cić, V. M. Leovac, A. F. Petrović, S. J. XIII. Synthesis and Thermal Studies c .Chem.,2002								
6.		ić, S. J. Skuban, D. M. Petrović, A. F. s-S-Se-I system, Journal of Optoelect				ogenides from				
7.		rović, S.R. Lukić, D.D. Štrbac: Critical on to some chalcogenide glasses, Jou								
8.		ić, D. M. Petrović, Ž. N. Cvejić, A F. P enide Thin Films, Journal of Optoelect				er-containing				
9.		ć, D.M. Petrović, G.R.Štrbac, A.F.Pet e20As14SxSe52-xI14, Journal of Phy				stability of				
10.		nidis-Petrovic, G.R.Strbac, D.D.Strbac 19, 353(2007)2014	c, Kinetics of non-isoth	ermal crystallizati	on of chalcogenide, J.Non-C	Cyst.Solids,				
Sun	nmary data	for teacher's scientific or art and profe	essional activity:							
Quot	ation total :		153							
Total	of SCI(SS	CI) list papers :	25							
Curre	ent projects	:	Domestic :	1	International:	0				

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Kulić J. Filip			
Acad	Academic title:					Associate Professor		
Nam	Name of the institution where the teacher works full time and				Faculty of Technical Sciences - Novi Sad			
starti	ng date:				01.09.1994	01.09.1994		
Scientific or art field:			Automatic Co	Automatic Control and System Engineering				
Academic carieer Year Institution					Field			
Acad	lemic title e	ection:	2008	Faculty of Technical Science	ences - Novi Sa	ad	Automatic Control and System Engineering	
PhD	thesis		2003	Faculty of Technical Science	ences - Novi Sa	ad	Automatic Control and System Engineering	
Magi	ster thesis		1999	Faculty of Technical Scient	ences - Novi Sa	ad	Automatic Control and System Engineering	
Bach	elor's thesi	3	1994	Faculty of Technical Science	ences - Novi Sa	ad	Electroenergetics	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	AU44	Contro	ol Systems I	Dogian		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
١.	A044	Contro	n Systems i	Design			asurement and Control Engineering, uate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						( H00) Med	chatronics, Undergraduate Academic Studies	
2.	E226	Automatic Control Systems					asurement and Control Engineering, uate Academic Studies	
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
					( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
3.	E238A	Contro	ol Systems	echnology		( E20) Computing and Control Engineering, Undergraduate Academic Studies		
							asurement and Control Engineering, uate Academic Studies	
4	EEISOS	Syston	ma of Autom	agtic Control in Dower Eng	incoring	( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
4.	EEI302	Syster	ns of Auton	natic Control in Power Eng	lineering		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	H1405	Optimi	zation Meth	nods		( H00) Med	chatronics, Undergraduate Academic Studies	
6.	H302	Contro	ol Systems 2	2		( H00) Med	chatronics, Undergraduate Academic Studies	
7.	M325	Autom	atic Control	Systems		( M20) Med Undergrad	chanization and Construction Engineering, uate Academic Studies	
8.	BMI125	Biolog	ical Control	Systems		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
9.	E2315	Electri	cal Machine	es in Automatic Control Sy	rstems	( MR0) Me Undergrad	asurement and Control Engineering, uate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	EMSAU 1	Autom	atic Control	Systems in Electronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
11.	SEAU01	Nonlin	ear progran	nming and evolutionary co	mputations		tware Engineering and Information Technologies, uate Academic Studies	
12.	SEAU03	Real-ti	me control	algorithms			tware Engineering and Information Technologies, uate Academic Studies	
13.	DE410S	Select	ed Topics ir	n the Field of Automatic Co	ontrol	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	ist of courses being held by the teacher in the accredited study programmes									
	ID	Course name	Study programme name, study type							
			( E20) Computing and Control Engineering, Master Academic Studies							
14.	E2515	Intelligent Control Systems	( MR0) Measurement and Control Engineering, Master Academic Studies							
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies							
15.	M2550	Automatic Control Systems in Motor Vehicles	( M22) Mechanization and Construction Engineering, Master Academic Studies							
16.	E2532	Automatic Control Systems Project Management	( E20) Computing and Control Engineering, Master Academic Studies							
17.	SEAM01	Intelligent Control Systems	( SE0) Software Engineering and Information Technologies, Master Academic Studies							
18.	DAU007	Selected Topics in Artificial Intelligence in Control and Signal Processing	( E20) Computing and Control Engineering, Doctoral Academic Studies							
19.	DE410	Selected Topics in the Field of Automatic Control	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies							
19.	DL410	Selected Topics in the Field of Automatic Control	( OM1) Mathematics in Engineering, Doctoral Academic Studies							
			( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies							
			( E20) Computing and Control Engineering, Doctoral Academic Studies							
			( F00) Graphic Engineering and Design, Doctoral Academic Studies							
			( F20) Engineering Animation, Doctoral Academic Studies							
			( G00) Civil Engineering, Doctoral Academic Studies							
20.	SID04	Current State in the Field	( GI0) Geodesy and Geomatics, Doctoral Academic Studies							
20.			( H00) Mechatronics, Doctoral Academic Studies							
			( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies							
			( M00) Mechanical Engineering, Doctoral Academic Studies							
			( OM1) Mathematics in Engineering, Doctoral Academic Studies							
			( S00) Traffic Engineering, Doctoral Academic Studies							
			( Z00) Environmental Engineering, Doctoral Academic Studies							
21.	DAU017	Selected Topics from Totally Integrated Automatic Control Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies							
			( A00) Architecture, Doctoral Academic Studies							
22.	SID04	Present State in the Field	( AS0) Scenic Design, Doctoral Academic Studies							
			( Z01) Safety at Work, Doctoral Academic Studies							
Rep	oresentative	e refferences (minimum 5, not more than 10)								
1.	•	Kukolj, Vesna Bengin, Filip Kulić: Osnovi klasične teorije aut 1str., UDK: 681.5(075.8),	omatskog upravljanja kroz rešene probleme, Sombor, Somel,							
2.		Kukolj, Filip Kulić: Projektovanje sistema automatskog uprav 2str., UDK: 681.5(075.8),	ljanja u prostoru stanja, Novi Sad, Fakulet tehničkih nauka,							
3.		F.Kulić, E.Levi: Design Of The Speed Controller For Senscitive Study, Artificial Intelligence in Engineering, 2000, Vol. 2								
4.		S.Kuzmanović, E.Levi, F.Kulić: Design of Near Optimal, WI. 120, No. 1, str. 17-34	ide Range Fuzzy Logic Controller, Fuzzy Sets and Systems,							
5.		F.Kulić, D.Popović, Z.Gorečan: Determining Topological Cal Neural Network, Electric Machines and Power Systems,	hanges and Critical Load Levels of a Power System by Means 1997, Vol. 25, No. 8, str. 917- 926, ISSN 0731-356x.							
6.		D.Popović, F.Kulić, Z.Gorečan: Fast Dynamic Stability Ana n Transactions on Electrical Power (ETEP), 1998, Vol. 8, No								
7.		ć, D.Kukolj, F.Kulić: Monitoring and Assessment of Voltage Input Set, IEE ProcGener. Transm. Distrib, 1998, Vol. 14								

## ASTRAS STUDIOS

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10)

- 8. Matić Dragan, Kulić Filip, Pineda-Sanchez Manuel, Kamenko Ilija: "Support vector machine classifier for diagnosis in electrical machines: Application to broken bar", Expert Systems With Applications, vol.39 br.10, str. 8681-8689, 2012.
- 9. Čongradac Velimir, Kulić Filip: "Recognition of the importance of using artificial neural networks and genetic algorithms to optimize chiller operation", Energy and Buildings, vol. 47, str. 651-658; April 2012.

10.	llić Slobodan; Vukmirović Srđan; Erdeljan Aleksandar; Kulić Filip: "Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, vol.16, br., str. S215-S224, 2012								
Su	Summary data for teacher's scientific or art and professional activity:								
Quo	tation total :	32							
Tota	l of SCI(SSCI) list papers :	12							
Curr	ent projects:	Domestic :	2	International :	0				
Curi	ent projects.	Domestic .	2	international.	U				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Kupusinac D. Aleksandar				
Academic title:				Assistant Professor					
-		titution v	vhere the te	acher works full time	e and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:					01.04.2007			
Scientific or art field:				Applied Computer Science and Informatics					
	emic carie		Year	Institution				Field	
-	emic title e	lection:	2011	Faculty of Technic				Applied Computer Science ar	
	thesis		2010	Faculty of Technic				Applied Computer Science ar	
$\vdash$	ster thesis		2008	Faculty of Technic				Applied Computer Science ar	
	elor's thesis		2005	Faculty of Technic				Electrical and Computer Engi	neering
List	of courses b	eing he	ld by the te	acher in the accredit	ted stu	ldy programme	S		
	ID	Course	e name				Study pro	gramme name, study type	
1.	E131	Ohiect	-Oriented F	Programming				asurement and Control Engine uate Academic Studies	ering,
			- Chomod i					er, Electronic and Telecommun g, Undergraduate Academic St	
2.	E223A	Object	Programm	ina			(E20) Con Academic	nputing and Control Engineerin Studies	g, Undergraduate
				9			Academic		
3.	EOS36	EOS36 Elektronsko poslovanje i ugovaranje					( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies		
4.	SZP01	SZP01 Selected topics in Information technologies				( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies			
						(E20) Computing and Control Engineering, Doctoral Academic Studies			g, Doctoral
5.	DRNI01	RNI01 Selected Topics in Computer Programming			nming		( H00) Med	chatronics, Doctoral Academic	Studies
							( OM1) Ma Studies	thematics in Engineering, Doct	oral Academic
Rep	oresentative	reffere	nces (minin	num 5, not more tha	n 10)				
1.	Kupusina	ıc A.: Zb	irka rešenil	n zadataka iz progra	ımsko	g jezika C++. N	lovi Sad: FT	N, 2011.	
2.	Malbaški educatior	D., Kup n manag	usinac A., I jement, 201	Popov S.: The Impa I1, Vol. 6, No 4, pp.	act of 0 1073-	Coding Style or 1082, ISSN 18	the Readal 40-1503	bility of C Programs, TTEM. Te	hnics tehnologies
3.				Kupusinac A.: Emer 011, Vol. 5, No 3, pp				tion: Risk versus growth potenti	al, African Journal
4.				Automatic Verification bar, 2011, pp. 177-1				al Scientific Conference on Indi	ustrial Systems -
5.								ptual Definitions, 15. Internatio 31-185, ISBN 978-86-7892-341	
6.								nguage based on decision trees schen, Graz, 16-18 April, 2009,	
7.				Part-of-Speech Tage , LAAC, 13-14 Nove				ov Models and Machine Learnin 978-86-81879-26-9	g, 3. Speech and
8.	Conf. on	Comput		lligence, Man-Machi				ging For Serbian Language, 8. IMMACS), Peurto de la Cruz: T	
9.			usinac A.: I 2217-8309		nvaria	ınt, Technology	Education	Management Informatics - TEN	1, 2012, Vol. 1, No
10.				Analysis of Loop Se 7, ISSN 2217-8309	emanti	cs using S-forn	nulas, Techr	nology Education Management	Informatics - TEM,
	•	for tead	her's scien	tific or art and profes		l activity:			
	ation total :	21) " :			0				
	of SCI(SS	, .	apers :		1 Domo	oatio :	2	International	
Current projects: Domestic: 2						International :	0		

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Ličen S. Branislava				
	lemic title:				Lecturer				
Nam	Name of the institution where the teacher works full time and					Faculty of Technical Sciences - Novi Sad			
starting date:					07.04.2005				
Scier	ntific or art f	ield:			English				
Acad	lemic cariee	er	Year	Institution			Field		
Acad	lemic title el	ection:	2012	Faculty of Technical Sci	ences - Novi Sa	ad	English		
Bach	elor's thesis	3	2009	Faculty of Philosophy - I	Novi Sad		Philology		
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	AEJ1L	Englisl	h Language	e - Elementary		( A00) Arch	hitecture, Undergraduate Academic Studies		
2.	AEJ2L	Englisl	h Language	intermediate		( A00) Arch	hitecture, Undergraduate Academic Studies		
3.	AEJ2Z	Englisl	h intermedia	ate		( A00) Arch	hitecture, Undergraduate Academic Studies		
4.	AEJ3Z	Englisl	h Language	e - upper intermediate		( A00) Arch	hitecture, Undergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
						( F10) Eng Studies	ineering Animation, Undergraduate Academic		
5.	E21I0	Izborni strani jezik 1				( GI0) Geodesy and Geomatics, Undergraduate Academi Studies			
						( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
					( SEL) Software Engineering and Information Technolog Loznica, Undergraduate Academic Studies				
						( G00) Civil Engineering, Undergraduate Academic Studies			
							chanization and Construction Engineering, luate Academic Studies		
		English Language – Elementary				( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies		
6.	EJ01L						chnical Mechanics and Technical Design, luate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic		
						( S00) Traf Academic	ffic and Transport Engineering, Undergraduate Studies		
							tal Traffic and Telecommunications, luate Academic Studies		
							ver, Electronic and Telecommunication g, Undergraduate Academic Studies		
					( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
7.	EJ01Z	Englisl	h Language	e - Elementary		( Z01) Safe	ety at Work, Undergraduate Academic Studies		
						( ZC0) Clean Academic	an Energy Technologies, Undergraduate Studies		
							aster Risk Management and Fire Safety, luate Academic Studies		
						(Z20) Envii Studies	ronmental Engineering, Undergraduate Academic		

## ASTRAS STUDIOS

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes							
	ID	Course name	Study programme name, study type					
			( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies					
8.	EJ02L	English Language – Pre-Intermediate	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies					
			( Z01) Safety at Work, Undergraduate Academic Studies					
			( ZC0) Clean Energy Technologies, Undergraduate Academic Studies					
			( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( I10) Industrial Engineering, Undergraduate Academic Studies					
9.	EJ02Z	English Language - Dra Intermediate	( I20) Engineering Management, Undergraduate Academic Studies					
9.		English Language – Pre-Intermediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies					
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies					
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies					
10.	EJ03Z	English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies					
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies					
			( Z01) Safety at Work, Undergraduate Academic Studies					
11.	EJ04L	English Language – Upper Intermediate	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies					
			(Z20) Environmental Engineering, Undergraduate Academic Studies					
			( E20) Computing and Control Engineering, Undergraduate Academic Studies					
			( ES0) Power Software Engineering, Undergraduate Academic Studies					
			( F10) Engineering Animation, Undergraduate Academic Studies					
12.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
			(AH0) Architecture, Master Academic Studies					

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	ist of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
13.	EJ2L	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
14.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
	15. EJ3L		( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
15.		English Language – Advanced	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
16.	EJE5	English Language – First Certificat 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
17.	EJE6	English Language - First Certificate 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
18.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies				
19.	EJEI1	English in Engineering 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
20.	EJEI2	English in Engineering 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
21.	EJF5	English Language for GRID 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
22.	EJF6	English Language for GRID 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
23.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies				
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies				
24.		English Language – ESP Course	( M30) Energy and Process Engineering, Undergraduate Academic Studies				
24.	EJM	Lingilon Language - LOF Coulse	( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies				
			( P00) Production Engineering, Undergraduate Academic Studies				
25.	EJPST	English Language in Postal Traffic	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies				
26.	EJSIT	English Language in Traffic and Transport	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies				

## LAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
27.	EJZ	English Language - Specialized	(Z20) Environmental Engineering, Undergraduate Academic Studies				
28.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
29.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
30.	ISIT07	English Language 2	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies				
31.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				
32.	ASI431	English Language 2	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				
33.	BMI80	English 1	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
34.	BMI81	English 2	( BM0) Biomedical Engineering, Undergraduate Academic Studies				
35.	EJIIM	English for Specific Purposes	( I10) Industrial Engineering, Undergraduate Academic Studies				
35.	LJIIIVI	English for Specific Furposes	( I20) Engineering Management, Undergraduate Academic Studies				
36.	ETI05	English language - Elementary	( E02) Electronics and Telecommunications, Undergraduate Professional Studies				
37.	ETI10	English Language-Lower	( E02) Electronics and Telecommunications, Undergraduate Professional Studies				
38.	ETI15	Engleski jezik - srednji	( E02) Electronics and Telecommunications, Undergraduate Professional Studies				
39.	ETI20	Engleski jezik - napredni	( E02) Electronics and Telecommunications, Undergraduate Professional Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
40.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
41.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
42.	eja	English Language – a Specialized Course	(AH0) Architecture, Master Academic Studies				
43.	EJE7	English Language - Advanced	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
44.	F507	English Language for GRID 3	( F00) Graphic Engineering and Design, Master Academic Studies				

## THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



	Engineering						
List c	List of courses being held by the teacher in the accredited study programmes						
	ID Course name		Study programme name, study type				
45.	NIT03	Business English			Engineering - Advanced Englaster Academic Studies	gineering	
Rep	oresentative	e refferences (minimum 5, not more th	an 10)				
1.	"Formal a	and Aesthetic Aspects of Nadine Gorda, br. 7, 2010., str.191-198.	dimer's Short Story", R	omanian Journal	of English Studies, Universit	ty of the West	
2.	"Summa Beogradi	rization Skills of Engineering Students J, 2011., str. 291-299.	s' Reading in a Second	Language", Jezi	k struke, izazovi i perspektiv	e, Univerzitet u	
3.		e, Ethnicity and Gender in Nadine Gor USSE Conference, Pecs, 2010., str. 2		ner Stories", Sele	cted Papers in Literature and	d Culture from	
4.		the Interregnum: Nadine Gordimer's ad American Studies, University of the				onference on	
5.	"Preispiti	vanje istorijskog konteksta u Barnsov	om romanu Floberov p	apagaj", Sveske,	br.100, Pančevo, jun 2011	., str. 69-77.	
6.		e udžbenika za stručni engleski jezik z u, 2009., str.445-454.	za studente različitog p	oredznanja", Jezik	struke, teorija i praksa, Uni	verzitet u	
7.	"Istorijat nastave stručnog engleskog jezika na FTN-u u Novom Sadu", Jezik struke, teorija i praksa, Univerzitet u Beogradu, 2009., str. 170-176.						
8.	8. Zajednica i pojedinac u delima Toni Morison u romanima Najplavlje oko, Sula, Voljena i Katreno luče, 2009.						
Sur	Summary data for teacher's scientific or art and professional activity:						
Quot	ation total :		0				
Total	of SCI(SS	CI) list papers :	0				
Curre	rent projects: Domestic: 0 International: 0						



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Lončare					Lončarević M	nčarević M. Ivana		
Academic title:					Assistant Professor			
1	Name of the institution where the teacher works full time and					Faculty of Technical Sciences - Novi Sad 01.06.2004		
starti	starting date:							
	Scientific or art field: Physics							
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title e	lection:	2010				Physics	
PhD	thesis		2010	Faculty of Physics - Beo			Physical Science	
	ster thesis		2008	Faculty of Physics - Beo	<u> </u>		Physical Science	
	elor's thesi		2003	Faculty of Sciences - No			Physical Science	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E103	Physic	:s			Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies asurement and Control Engineering,	
						Ùndergrad	uate Academic Studies	
2.	EOS06	Physic	s				ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
3.	GG06	Civil E	ngineering	Physics		( G00) Civi	ll Engineering, Undergraduate Academic Studies	
						Studies	ineering Animation, Undergraduate Academic	
4.	H101	Physic	s			( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
							chatronics, Undergraduate Academic Studies	
5.	IAFI01	1 Colors and Light				( F10) Engineering Animation, Undergraduate Academic Studies		
						( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies		
						( M30) Energy and Process Engineering, Undergraduate Academic Studies		
6.	M101	Techn	ical Physics	:		( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
						Studies	duction Engineering, Undergraduate Academic	
						Undergrad	aster Risk Management and Fire Safety, uate Academic Studies	
7.	ETI06	Physic	s			( E02) Electronics and Telecommunications, Undergraduate Professional Studies		
8.	ZC008	Techn	ical physics			( ZC0) Cle Academic	an Energy Technologies, Undergraduate Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.			• •	rević I., Petkovic M., Jaks e, Physical Review E, 201	,		tion in random sequential adsorption of extended 1-8	
2.				rević I., Jakšić Z., Vrhova cts on a triangular lattice,			n study of anisotropic random sequential Vol. 84, No 5, pp. 5160-1	
3.							ration properties in a diffusive model of k-mers II. 84, No 031109, pp. 1-13	
4.							equential adsorption of polydisperse mixtures on ent, 2010, ISSN 1742-5468	
5.				ović Lj., Vrhovac Lj., Belić 009, Vol. 80, No 2	A.: Adsorption	n, desorption	n, and diffusion of k-mers on a one-dimensional	
6.	Randon	n sequei	ntial adsorp	ac S., Lončarević I.: tion of polydisperse mixtu s, Vol. 78, No 061603, pp.		substrates		
7.	lattice			•	•		quential adsorption of mixtures on a triangular	
ldot	, The European Physical Journal E, 2007, Vol. 24, pp. 19-26, ISSN 1292-8941							

## TE STUDIO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication



				Engineering	_
Representative refferences (minimum 5, not more than 10)					
8. Lončarević I., Budinski-Petković Lj., Vrhovac S.: Reversible random sequential adsorption of mixtures on a triangular lattice , Physical Review E, 2007, Vol. 76, No 031104, pp. 1-9					
9. Lončarević I.: Irreversible deposition of extended objects with diffusional relaxation on discrete substrates, The European Physical Journal B, 2010, No 73, pp. 439-445					
Infracellular	Transport along Microtubules, Jour				
nmary data fo	r teacher's scientific or art and profe	essional activity:			
Quotation total: 0					
Total of SCI(SSCI) list papers : 12					
Current projects : Domestic : 1 International : 0					0
	Lončarević , Physical Lončarević relaxation of Satarić M., Infracellular ISSN 1546- nmary data fo ation total : of SCI(SSCI)	Lončarević I., Budinski-Petković Lj., Vrhovac S , Physical Review E, 2007, Vol. 76, No 03110 Lončarević I.: Irreversible deposition of extend relaxation on discrete substrates, The Europea Satarić M., Kozmidis-Luburić U., Budinski-Petk Infracellular Transport along Microtubules, Jou ISSN 1546-1955 Inmary data for teacher's scientific or art and profes ation total:	Lončarević I., Budinski-Petković Lj., Vrhovac S.: Reversible random , Physical Review E, 2007, Vol. 76, No 031104, pp. 1-9  Lončarević I.: Irreversible deposition of extended objects with diffusion relaxation on discrete substrates, The European Physical Journal B, Satarić M., Kozmidis-Luburić U., Budinski-Petković Lj., Lončarević I.: Infracellular Transport along Microtubules, Journal of Computational ISSN 1546-1955  Inmary data for teacher's scientific or art and professional activity:  ation total:  O  of SCI(SSCI) list papers:  12	Lončarević I., Budinski-Petković Lj., Vrhovac S.: Reversible random sequential , Physical Review E, 2007, Vol. 76, No 031104, pp. 1-9  Lončarević I.: Irreversible deposition of extended objects with diffusional relaxation on discrete substrates, The European Physical Journal B, 2010, No Satarić M., Kozmidis-Luburić U., Budinski-Petković Lj., Lončarević I.: Intrinsic E Infracellular Transport along Microtubules, Journal of Computational and Theore ISSN 1546-1955  Inmary data for teacher's scientific or art and professional activity:  ation total:  O SCI(SSCI) list papers:	Lončarević I., Budinski-Petković Lj., Vrhovac S.: Reversible random sequential adsorption of mixtures on a triar, Physical Review E, 2007, Vol. 76, No 031104, pp. 1-9  Lončarević I.: Irreversible deposition of extended objects with diffusional relaxation on discrete substrates, The European Physical Journal B, 2010, No 73, pp. 439-445  Satarić M., Kozmidis-Luburić U., Budinski-Petković Lj., Lončarević I.: Intrinsic Electric Fields as a Control mech Infracellular Transport along Microtubules, Journal of Computational and Theoretical Nanoscience, 2009, Vol. 6 ISSN 1546-1955  Inmary data for teacher's scientific or art and professional activity:  ation total:  0  of SCI(SSCI) list papers:  12



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Lončar-Turukalo G. Tatjana					
Acad	lemic title:				Assistant Professor			
	Name of the institution where the teacher works full time and				Faculty of Technical Sciences - Novi Sad			
					01.05.2006			
Scie	ntific or art f	ield:			Telecommun	elecommunications and Signal Processing		
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	ection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
_	ster thesis		2007	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
Bach	elor's thesis	3	2001	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	BMI105		ical basics, dical signal	processing and modelling	j of	( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
2.	BMI123	Advan	ced biomed	lical signal analysis		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
3.	EK202	Comm	unication n	etworks - introduction		Undergrad	asurement and Control Engineering, uate Academic Studies	
<u> </u>						Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EK321	IP tech	nnology			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EK450	Development Tools in Telecommunications an Processing 2			and Signal	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
6.	EK458	Telecommunication networks				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	ETI25	Pattern recognition				( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies	
8.	ETI37	Digital	Image Pro	cessing		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies	
9.	SZP01	Select	ed topics in	Information technologies		( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies		
10.	BMIM2B	Biome	dical statist	ics		( BM0) Biomedical Engineering, Master Academic Studies		
11.	BMIM2C	Multiva		ysis and complexity of phy	ysiological	( BM0) Biomedical Engineering, Master Academic Studies		
12.	BMIM2D			/ in biosystems		( BM0) Biomedical Engineering, Master Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.							ers in Isodistributional Surrogate Data: Model and , No 1, pp. 16-24, ISSN 0018-9294	
2.				o T., Sarenac O., Japund , 2012, ISSN 0010-4825	zic-Zigon N., B	ajić D.: Unb	piased entropy estimates in stress: a parameter	
3.	Zigon, Ni	na: "Ter	nporal Anal				Bojic, David Murphy, Julian Paton,; Japundzic Mild Emotional Stress"; Stress 2009;00;1-13;	
4.	of Sponta	neous I	Barorecepto		I Stress in Free	ly Moving R	Bojić, Nina Japundžić-Žigon: Temporal Analysis Rats, 5th Conference of the European Study	
5.		quency	Analysis, 3				Response to Acute Stress in Freely Moving Rats: gineering in Medicine and Biology Society, august,	
6.	Olivera Šarenac, Srdja Drakulić, Maja Lozić, Tatjana Lončar Turukalo, Dragana Bajić, Nina Japundžić Žigon: Temporal Analysi							
7.	Cardiova	scular T		of Rats, 11th Mediterrane			apundžić-Žigon: Joint Symbolic Dynamics of I and Biological Engineering and Computing	

## STUDIO ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10)

- Tatjana Lončar-Turukalo, Snežana Milosavljević, Olivera Šarenac, Nina Japundžić Žigon, Dragana Bajić: Entropy and Gaussianity
   Measures of Deterministic Dynamics of Heart Rate and Blood Pressure Signals of Rats, Acta Polytechnica Hungarica, Journal of Applied Sciences, 2008, Vol. 5, No. 1, pp. 121- 133, ISSN 1785-8860.
- 9. Dragana Bajić, Tatjana Lončar-Turukalo, Olijandra Šibarević, "On Direct Sequential Analysis of HRV Signals", Archive of Oncology, Vol.13, No.1, January 2005
- Olivera Šarenac, Srđa Drakulić, Maja Lozić, Tanja Lončar-Turukalo, Dragana Bajić, Julian FR Paton, David Murphy, Nina Japundž: Time and frequency domain analysis of the cardiovascular response to stress in conscious rats, Acta Cardiologica, 2008, Vol. 63, No. 3.

	2006, Vol. 03, No. 3.						
Sι	Summary data for teacher's scientific or art and professional activity:						
Quo	Quotation total: 28						
Tota	Total of SCI(SSCI) list papers: 3						
Cur	Current projects : Domestic : 2 International : 0						

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Luković S. Ivan				
Acad	lemic title:				Full Professor				
Nam	Name of the institution where the teacher works full time and				Faculty of Technical Sciences - Novi Sad				
starting date:			18.05.1991						
Scier	ntific or art f	ield:			Applied Comp	Applied Computer Science and Informatics			
Acad	lemic carie	er	Year	Institution			Field		
Acad	lemic title e	lection:	2006	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics		
PhD	thesis		1996	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics		
Magi	ster thesis		1993	School of Electrical Engi	ineering - Beog	ırad	Applied Computer Science and Informatics		
Bach	elor's thesi	S	1990	Military-Technical Facult	ty - Zagreb		Applied Computer Science and Informatics		
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	ogramme name, study type		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
1.	E2I40	Dotob	ase System				easurement and Control Engineering, luate Academic Studies		
١.	E2140	Dalaba	ase System	is .			tware Engineering and Information Technologies, luate Academic Studies		
						( SEL) Sof Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies		
2.	E2l41	Inform	ation Systo	m Engineering		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
۷.	L2141	111101111	alion Syste	in Engineering		, ,	tware Engineering and Information Technologies, luate Academic Studies		
3.	GI205	Information Systems and Databases				( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
4.	GI408A	Geosp	atial Datab	ases		( GI0) Geo Studies	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
5.	RI43A	Databa	ases 1			( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies		
							easurement and Control Engineering, luate Academic Studies		
6.	RI43B	Databa	3505 7			( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
0.	INI40D	Databa	u363 Z			( SE0) Sof Undergrad	tware Engineering and Information Technologies, luate Academic Studies		
7.	0RI43B	Databa	ases 2			( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies		
8.	BM118E	Databases				( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
9.	EE417A	Databases					er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
10.	SE0013	Data (	Organization			Undergrad	tware Engineering and Information Technologies, luate Academic Studies		
10.	020013	Daia	organizatioi	1			tware Engineering and Information Technologies - Indergraduate Academic Studies		
11	SE0016	Datah	2000				tware Engineering and Information Technologies, luate Academic Studies		
11. SE0016 Databases					( SEL) Sof Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies			



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	ist of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( E20) Computing and Control Engineering, Master Academic Studies				
12.	E2502	Data Warehouse Systems	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
			( E20) Computing and Control Engineering, Master Academic Studies				
			( ES0) Power Software Engineering, Master Academic Studies				
13.	E2517	Database Management Systems	( MR0) Measurement and Control Engineering, Master Academic Studies				
			( SE0) Software Engineering and Information Technologies, Master Academic Studies				
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
14.	E2518	Software Based Business Process Modeling	( E20) Computing and Control Engineering, Master Academic Studies				
14.	L2310	Software based business i rocess wodering	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
15.	E2530	Domain Specific Modeling and Languages	( E20) Computing and Control Engineering, Master Academic Studies				
10.		Domain opcome modeling and Edinguages	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
16.	DRNI02	Selected Topics in Advanced Software Architecture	( E20) Computing and Control Engineering, Doctoral Academic Studies				
17.	DRNI04	Selected Topics in Database Management	( E20) Computing and Control Engineering, Doctoral Academic Studies				
18.	DRNI05	Selected Topics in Software Standardization and Quality	( E20) Computing and Control Engineering, Doctoral Academic Studies				
10	DDNIO	Colocted Tonics in Information Cyatama	( F20) Engineering Animation, Doctoral Academic Studies ( E20) Computing and Control Engineering, Doctoral				
19.	DRNI08	Selected Topics in Information Systems	Academic Studies				
Re		e refferences (minimum 5, not more than 10)					
1.	Developr	., Ivančević V., Čeliković M., Aleksić S.: DSLs in Action with nent, in the book: Formal and Practical Aspects of Domain- ISA, 2013, pp. 502-532, ISBN 978-1-4666-2092-6.	Specific Languages: Recent Developments; Chapter 17., IGI				
2.	Conferen	.: From the Synthesis Algorithm to the Model Driven Transface on Informatics, Herlany: Slovak Society for Applied Cybe f Electrical Engineering and Informatics, 23-25 Novembar, 2	ernetics and Informatics and Technical University of Košice -				
3.	Luković I.: Application of Information System Development Tools and Methods - Some Experiences from Industry and Research						
4.	Luković I: An Approach to Specification and Generation of Software Systems using Form Types, 2nd Conference on Compilers,						
5.		Luković I, Govedarica M: Principi projektovanja baza podat ovi Sad, 2004, ISBN: 86-80249-81-5, 700 str.	aka, II izdanje, Univerzitet u Novom Sadu, Fakultet tehničkih				
6.	Mogin P, 350 str.	Luković I: Principi baza podataka, Univerzitet u Novom Sac	lu, Fakultet tehničkih nauka i MP "Stylos", Novi Sad, 1996,				
7.		ć N., Aleksić S., Popović A., Luković I.: Transformations of ATICS, SLOVAK ACADEMY OF SCIENCES, ISSN 1335-9					
8.		and Experience, John Wiley & Sons Inc, Hoboken, USA, IS	g Complex Database Schemas Using Form Types", Software: SN: 0038-0644, DOI: 10.1002/spe.820, Vol. 37, No. 15, 2007,				
9.		• •	el P.: A DSL for PIM Specifications: Design and Attribute Systems (ComSIS), ISSN 1820-0214, 2011, Vol. 8, No 2, pp.				

# SITAS STUD

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### **Study Programme Accreditation**

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10)

Čeliković M., Luković I., Aleksić S., Ivančević V.: A MOF based Meta-Model and a Concrete DSL Syntax of IIS*Case PIM 10 Concepts, Computer Science and Information Sistems, ISSN 1820-0214, 2012, Vol. 9, No 3, pp. 1075-1103.

Summary data	for teacher's	scientific or art	and professional	activity:
--------------	---------------	-------------------	------------------	-----------

Summary data for teacher's scientific or art and professional activity.							
Quotation total :	22						
Total of SCI(SSCI) list papers :	5						
Current projects :	Domestic: 1 International: 0						

Strana 290 Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Malbaša D. Veljko				
<b>—</b>	emic title:				Full Professor				
Nam	e of the ins	titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				01.11.1979				
Scientific or art field:			Electronics						
Acad	emic carie	er	Year	Institution			Field		
Acad	emic title e	lection:	1995	Faculty of Technical Scientification   Zrenjanin - Zrenjanin	ences "Mihajlo	Pupin" in	Electronics		
PhD	thesis		1985	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering		
Magi	ster thesis		1981	School of Electrical Engi	ineering - Beog	grad	Electrical and Computer Engineering		
Bach	elor's thesi	s	1975	School of Electrical Engi	ineering - Beog	grad	Electrical and Computer Engineering		
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
1.	E136	Introdu	uction to Mi	crocomputer Electronics		Undergrad	asurement and Control Engineering, uate Academic Studies		
							er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	E136d	Introdi	uction to Did	gital and Microcomputer E	lectronics	Undergrad	asurement and Control Engineering, uate Academic Studies		
				,			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
3.	E222A	Electronics				Academic	E20) Computing and Control Engineering, Undergraduate Academic Studies		
4.	EM401	Real-Time Microcomputer Systems					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
5.	BMI103	Microprocessor Systems in Medicine				( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
6.	EM300A	Microp	orocessor E	lectronics		(MR0) Me	chatronics, Undergraduate Academic Studies asurement and Control Engineering, uate Academic Studies		
							er, Electronic and Telecommunication g, Undergraduate Academic Studies		
7.	EM305A	Digital	Microcontr	ollers		Ùndergrad	asurement and Control Engineering, uate Academic Studies		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EM404A	Comp	uter Electro	nics		l <u>`</u> .′ .	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	ETI16	Microc	computer El	ectronics		( E02) Electory ( E02) Profession	ctronics and Telecommunications, Undergraduate al Studies		
10.	ETI24	Real T	ime Embed	dded Systems		Profession			
11.	DE100S		ed Topics in erification	n Formal Methods of Harw	vare Desing		ver, Electronic and Telecommunication g, Specialised Academic Studies		
12.	DE401S	Desigr	n of Applica	tion Specific Integrated Ci	rcuits		ver, Electronic and Telecommunication g, Specialised Academic Studies		
13.	SI012	Microp	rocessor E	lectronics			ver, Electronic and Telecommunication g, Specialised Professional Studies		
14.	SI025	Select	ed Topics i	n Computer Electronics			ver, Electronic and Telecommunication g, Specialised Professional Studies		
15.	EM508	Design	and Deve	lopment of Embedded Sof	ftware		er, Electronic and Telecommunication g, Master Academic Studies		
16.	DE100	Selected Chapters in Formal Methods for F Design and Verification			lardware	(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
17.	DE401	ASIC I	Design				ver, Electronic and Telecommunication g, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
1.	Mezei I., Lukić M., Malbaša V., Stojmenović I.: Networks, COMPUT COMMUN, 2012, ISSN 0								
2.	Mezei I., Malbaša V., Stojmenović I.: Greedy Extension of Localized Auction Based Protocols for Wireless Actuator Task Assignment, Ad Hoc & Sensor WirelessNetworks: An International Journal, 2012, rad prihvaćen za štampanje.								
3.	Mezei I., Malbaša V., Stojmenović I.: Robot to Robot: Communication Aspects of Coordination in Robot Wireless Networks, IEEE Robotics and Automation Magazine, 2010, Vol. 17, No 4, pp. 63-69, ISSN 1070-9932								
4.	Zoranović A., Stojanović G., Malbaša V.: Development of an MP3 player using an MP3 hardware decoder, International Journal of Electrical Engineering Education, 2010, Vol. 47, No 3, pp. 329-342, ISSN 0020-7209								
5.	Sešić A., Dautović S., Malbaša V.: Dynamic Power Management of a System with a Two-Priority Request Queue Using Probabilistic Model Checking, IEEE Trans. on CAD, 2008, 2008, Vol. 27, No 2, pp. 403-407, UDK: 10.1109/TCAD.2007.911342								
6.	Liu H., Malbaša V., Mezei I., Nayak A., Stojmenović I.: "Coordination in Sensor, Actuator and Robot Networks", In: Wireless Sensor and Actuator Networks: Algorithms and Protocols for Scalable Coordination and Data Communication, Wiley Blackwell, 2010, str. 233-262, ISBN 978-0-470-17082-3								
7.	V. Malbaša, "Mikroprocesori i mikroračunari", u	ıdžbenik, Fakultet teh	ničkih nauka,	Novi Sad, 1992.					
8.	M. Manwaring, V. Malbaša, "An Architecture fo Math. Inform. 17 (2002), 97-128.	r Parallel Interpretation	on of Abstract	Machine Languages", Facta Universitatis, Ser.					
9.	V. Malbaša, M. Manwaring, "Pipelined Processor Architecture for Parallel Interpretation", Facta Universitatis, Series: Electronics and Energetics, Vol. 13, No.3, December 2000, 297-315.								
10.	V. Malbaša, "A Multimicroprocessor System for Jan. 1991, 31-40.	r Dynamic System Sir	mulation," Int	Journal for Computer Simulation, Vol. 56, No.1					
Sui	mmary data for teacher's scientific or art and profe	essional activity:							
Quo	tation total :	4							
Tota	l of SCI(SSCI) list papers :	3							
Current projects: Domestic: 2 International: 1									

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:						Malbaša V. Vuk				
Acad	demic title:					Assistant Professor				
Nam	e of the inst	itution v	vhere the te	acher works full tin	ne and	Faculty of Technical Sciences - Novi Sad				
starti	ing date:					01.11.2012				
Scientific or art field:				Computer Sci	ence					
Acad	demic carie	er	Year	Institution				Field		
Acad	demic title e	ection:	2011	Faculty of Science	es - No	ovi Sad		Com	outer Science	
PhD	thesis		2011					Inforr	matics	
Bach	nelor's thesi	3	2006					Inforr	matics and Computing	
List	of courses b	eing he	ld by the te	acher in the accred	ited stu	udy programme	es			
	ID	Course	e name				Study pro	gramn	ne name, study type	
1.	ESI003	Electri	c power so	tware development	t		( ES0) Pow Academic S		tware Engineering, Underg s	graduate
2.	ESI010	Rasics	of control	n nower systems			( ES0) Pow Academic S		tware Engineering, Underg s	graduate
۷.	231010	Basics of control in power systems					(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
3.	ESI013	3 Multi-tier applications development in power systems					( ES0) Power Software Engineering, Undergraduate Academic Studies			graduate
4.	ESI015	Distributed Computer Systems in Power Systems					( ES0) Pow Academic S		tware Engineering, Underg s	graduate
5.	ESI017	Mobile	computing	in power systems			( ES0) Pow Academic S		tware Engineering, Underg	graduate
6.	ESI018	GIS in	power syst	ems			( ES0) Power Software Engineering, Undergraduate Academic Studies			
Rep	presentative	reffere	nces (minin	num 5, not more tha	an 10)					
1.		rediction		ezunovic: Regression Chrophasor Measu			Power			
2.	C. Zheng PowerCo	, V. Mal n2012,	basa, M. K Auckland, N	ezunovic: A Fast St New Zealand, 2012	ability	Assessment So	cheme base	d on C	lassification and Regression	on Tree,
3.	Mapping	on Larg		tially Logistic Regre opulations, pp. 135 JSA			M			
4.	Multi-Pat	h Routir 0902 W	ng in Wirele Vorkshop, S	Tosic: Predictions ss Mesh Networks, IG 2: Learning and	Proce	edings of COS	Т			
5.	V. Malbasa, S. Vucetic: A Reservoir Sampling Algorithm with Adaptive									
	,	for tead	her's scien	tific or art and profe	essiona	l activity:				
	Quotation total: 1									
	of SCI(SS	<u> </u>	apers :		0			-		
Current projects : Domestic :					estic :	0		International:	0	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Malbaški T. Dušan				
Acad	lemic title:				Full Professor				
_		itution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				15.06.1975				
Scie	ntific or art f	ield:			Applied Computer Science and Informatics				
Acad	lemic carie	er	Year	Institution			Field		
Acad	lemic title e	ection:	1997	Faculty of Technical Sci			Applied Computer Science and Informatics		
PhD	thesis		1986	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering		
Ť	ster thesis		1980	School of Electrical Engi			Electrical and Computer Engineering		
Bach	elor's thesis	3	1974	School of Electrical Engi	ineering - Beog	ırad	Electrical and Computer Engineering		
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s			
	ID	Course	e name			Study pro	gramme name, study type		
1.	E111	Progra	amming Lar	nguages and Data Structur	res	Engineerin ( MR0) Me	ver, Electronic and Telecommunication g, Undergraduate Academic Studies asurement and Control Engineering, uate Academic Studies		
2.	E131	Object	t-Oriented F	Programming		( MR0) Me Undergrad (E10) Pow	asurement and Control Engineering, uate Academic Studies er, Electronic and Telecommunication		
3.	E214	Progra	amming Lar	nguages and Data Structur	res	( E20) Con Academic	Engineering, Undergraduate Academic Studies  ( E20) Computing and Control Engineering, Undergraduate Academic Studies  ( ES0) Power Software Engineering, Undergraduate		
4.	E223A	Object Programming				( E20) Con Academic ( ES0) Pov	E20) Computing and Control Engineering, Undergraduate cademic Studies ES0) Power Software Engineering, Undergraduate cademic Studies		
						( F10) Eng Studies	ineering Animation, Undergraduate Academic		
5.	H207	Progra	amming and	I Programming Languageঃ	6	( H00) Mechatronics, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies			
6.	GI111	Inform	ation techn	ologies in geodesy			GI0) Geodesy and Geomatics, Undergraduate Academic tudies		
7.	DRNI01	Select	ed Topics i	n Computer Programming		Academic	nputing and Control Engineering, Doctoral Studies chatronics, Doctoral Academic Studies		
			·			( OM1) Mathematics in Engineering, Doctoral Academic Studies			
8.	DRNI05	Select	ed Topics i	n Software Standardizatio	n and Quality	( E20) Computing and Control Engineering, Doctoral Academic Studies ( F20) Engineering Animation, Doctoral Academic Studies			
Rer	oresentative	reffere	nces (minir	num 5, not more than 10)		0, _119			
1.	(koautori	D.Obra	dović i V.M	albaša): "Analysis and Pra			n Improved Multimicroprocessor System", časopis menjen u Journal of Systems Architecture).		
2.	(koautori	J.Reke	cki i dr.): "A		chnological Pro		C Lathes by the Use of SAPOR-S System",		
3.				Popov S.: The Impact of 011, Vol. 6, No 4, pp. 1073-			bility of C Programs, TTEM. Tehnics tehnologies		
4.				omous Software Life Cycle dge, England, vol. 2, No 2		nal of Applie	d Systems Studies, Cambridge International		
5.				albaša):: "Multimicroproce 1985.<\eng>	ssor Performa	nce VS Sha	red Bus Efficiency", ACM Europian Regional		
6.	(koautor	D.lvetić)	): "Some No	otes on the Formal Definiti	on of Streams'	', YUJOR, V	ol.6, No. 2, 1996.		
7.	(koautori	M.Khlai	f, D.Obrado	ović): "A New Approach to	Soft System M	lethodology	", Automatika, Vol 30. (1989), No. 1-2.		

## TE STUDIO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
8.	. (koautor D.Obradović): "CLAS-a Formal Aid to Data Elements Identification", časopis YUJOR, vol. 4, no. 2, 1994.								
9.	9. (koautor D. Ivetić) "UML? HCI = Essential Modeling", IEEE 7th INES Conference, 4-6 March, Assuit-Luxor, Egypt, 2003.								
10.	0. (koautori B. Markoski, P. Hotomski): "Symbolic Execution in Program Testing", International ZEMAK Symposium, Struga, Macedonia, 2002								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	0							
Tota	l of SCI(SSCI) list papers :	2							
Curr	Current projects : Domestic : 0 International : 0								



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Marčetić P. Darko				
Acad	emic title:				Associate Professor				
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				01.04.2007				
Scier	ntific or art f	ield:			Power Electro	onics, Mach	ines and Facilities		
Acad	emic carie	er	Year	Institution			Field		
Acad	emic title e	lection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Power Electronics, Machines and Facilities		
PhD	thesis		2006	School of Electrical Engi	ineering - Beog	grad	Power Electronics, Machines and Facilities		
Magi	ster thesis		1998	School of Electrical Engi	ineering - Beog	grad	Power Electronics, Machines and Facilities		
Bach	elor's thesi	S	1992	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
List c	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
							easurement and Control Engineering, luate Academic Studies		
1.	E133	Power	Converters	S		( ZC0) Clea	an Energy Technologies, Undergraduate Studies		
						Èngineerin	er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
2.	EE308	Power	Electronics	3 2		Èngineerin	er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
3.	EOS14	Laboratory from electrical machines					Power Engineering - Renewble Sources of Electrical Undergraduate Professional Studies		
4.	EOS25	Solar and hybrid electric plants					ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies		
5.	F203	Electrical Machines				( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies		
6.	HE2465	Mechatronics of Transport and Construction			n Machines		chanization and Construction Engineering, luate Academic Studies		
7.	EE408A	Applica	ation of mic	roprocessors in power en	gineering	Undergrad	easurement and Control Engineering,		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EEI310	Industi	rial systems	s and protocols		Ùndergrad	easurement and Control Engineering, luate Academic Studies		
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
9.	DE109S	Select	ed Chapter	s in Electromotive Drives		Engineerin	ver, Electronic and Telecommunication ng, Specialised Academic Studies		
10.	DE409S	Conve	rters	of Digital Control of Drives		Èngineerin	ver, Electronic and Telecommunication ng, Specialised Academic Studies		
11.	EE524		ds of Regul onrollers	ation of Power Converters	s with		er, Electronic and Telecommunication ng, Master Academic Studies		
12.	EE534	Specia	al Electric M	lotor Drives		' '	er, Electronic and Telecommunication ng, Master Academic Studies		
13.	EE537	Specia	ıl Electrical	Machines			er, Electronic and Telecommunication ng, Master Academic Studies		
14.	DE109	Select	ed Chapter	s in Electromotive Drives		Èngineerin	ver, Electronic and Telecommunication ng, Doctoral Academic Studies chatronics, Doctoral Academic Studies		
15.	DE409	Moder Conve		of Digital Control of Drives	s and	( E10) Pow	ver, Electronic and Telecommunication ng, Doctoral Academic Studies		
Rer	oresentative			num 5, not more than 10)			-g; = -5te-s (5550-1110 Ottobio		
1.	Marčetić	D., Adži	ć E.: Impro	ved Three-Phase Current			on Motor Drives With DC-Link Shunt, IEEE		
$\vdash \vdash$	Transaction on Industrial Electronics, 2010, Vol. 57, No 7, pp. 1-9, ISSN 0278-0046								
2.							nstant Parameter Update, IEEE Transaction on ass=skype_pnh_		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



	2.19.1001.119								
Representative refferences (minimum 5, not more than 10)									
3.	Marčetić D., Krcmar I., Matic P.: Discrete Rotor Fundamental Frequency Ratio, International R				_ow Sampling to 04-3813.				
4.	Porobić V., Adžić E., Marčetić D.: High Speed Shaft Sensorless DFOC Induction Motor Drive with Field Angle Correction, International Review of Electrical Engineering IREE, 2011, Vol. 6, No 4, ISSN 1827-6660								
5.	Tomić J., Kušljević M., Marčetić D.: An Adaptive Resonator Based Method for Power Measurements According to the IEEE Trial- Use Standard 1459-2000 , IEEE Transactions on Instrumentation								
6.	Vasić V., Marčetić D., Jeftenić B., Vladan J.: Speed-Sensorless Control of Induction Motor Based on Reactive Power with Rotor Time Constant Identification, IET ELECTR POWER APP, 2010, Vol. 4, No 6, ISSN 1751-8660								
7.	Vasić V., Marčetić D., Oros Đ.: Prediction of Local Instabilities in Open-loop Induction Motor Drives, COMPEL - The international journal for computation and mathematics in electrical engineering, 2010, Vol. 29, No 3, ISSN 0332-1649								
8.	Oros Đ., Vasić V., Marčetić D., Kulić F.: Influer Journal of Advances in Electrical and Compute				ss scheme,				
9.	Oros Đ., Vasić V., Marčetić D.: NFO sensorles Power Components	s induction motor drive	e with on-line state	or resistance parameter upo	late, Electric				
10.	0. Kušljević M., Tomić J., Marčetić D.: Active power measurement algorithm for power system signals under non-sinusoidal conditions and wide-range frequency deviations, IET Generation, Transmission								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	0							
Tota	l of SCI(SSCI) list papers :	10	0						
Curr	ent projects :	Domestic :	1	International :	0				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Maretić B. Ratko					
<b>—</b>	lemic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				18.05.1993			
Scientific or art field:					Deformable B	Deformable Body Mechanics		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2009	Faculty of Technical Science	ences - Novi S	ad	Deformable Body Mechanics	
PhD	thesis		1997	Faculty of Technical Science	ences - Novi Sa	ad	Deformable Body Mechanics	
Magi	ster thesis		1993	Faculty of Technical Science	ences - Novi Sa	ad	Deformable Body Mechanics	
Bach	elor's thesi	S	1987	Faculty of Technical Scient	ences - Novi Sa	ad	Deformable Body Mechanics	
List	of courses b	eing he	ld by the te	acher in the accredited stu	idy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	A237	Materia	al Resistan	ce		( A00) Arch	nitecture, Undergraduate Academic Studies	
						Undergrad	chanization and Construction Engineering, uate Academic Studies ergy and Process Engineering, Undergraduate	
2.	NACO 4	Strone	th of Matar	iale		Academic		
2.	M204	4 Strength of Materials					chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Production Engineering, Undergraduate Academic Studies		
3.	M4305	Thermomechanics				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
4.	URZP14	Fundamentals of Mechanical Engineering					aster Risk Management and Fire Safety, uate Academic Studies	
5.	Z108	Fundamentals of Mechanics				<ul> <li>( Z01) Safety at Work, Undergraduate Academic Studies</li> <li>( ZC0) Clean Energy Technologies, Undergraduate Academic Studies</li> <li>(Z20) Environmental Engineering, Undergraduate Academ</li> </ul>		
						Studies	5 5.	
6.	BMI127	Biome	chanics			Studies	medical Engineering, Undergraduate Academic	
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	II1004	Mecha	inics and In	dustrial Engineering		(110) Industrial Engineering, Undergraduate Academic Studies		
8.	M44051	Theory	of Plates	and Shells		( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
9.	M4501	Indust	rial Design			( M40) Technical Mechanics and Technical Design, Master Academic Studies		
10.	M4505	Modell	ing of non-	linear systems		( M40) Technical Mechanics and Technical Design, Master Academic Studies		
						` ′	chanical Engineering, Doctoral Academic Studies	
11.	DM403	Mathe	matical Roo	d Theory		` ′	chnical Mechanics, Doctoral Academic Studies	
						( OM1) Mathematics in Engineering, Doctoral Academic Studies		
12.	ZRD16A	Select	ed chapters	s in mechanics and elastic	ity theory	( Z01) Safe	ety at Work, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Internation	nal Jou	rnal of Stru	ctural Stability and Dynam	ics, 2010, 10(5	5), 1111-112		
2.				and N. Grahovac: Buckling ds, 2009, 28, 131- 140.	g of a twisted a	nd compres	sed rod supported by Cardan joints. European	
3.	V. Glavar	danov a	and R. Mare	etic: Stability of a twisted a	nd compressed	d clamped re	od. Acta Mechanica, 2009, 202, 17-33.	
4.				nov: Impact of mounting wi 313, 308- 324.	ith an overlap o	on vibration	and stability of a rotating annular plate. Journal of	

## THE STUDION OF THE ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
5.	R. Maretic, V. Glavardanov and D. Radomirovic: Asymmetric vibrations and stability of a rotating annular plate loaded by a torque. Meccanica, 2007, 42, 537- 546.								
6.	R. Maretic, 2005, "Transverse vibration and stability of an eccentric rotating circular plate", Journal of Sound and Vibration 280, 467-478.								
7.	R. B. Maretic, V. B. Glavardanov, 2004, "Stability of a Rotating Heated Circular Plate with Elastic Support", Journal of Applied Mechanics, Transactions of the ASME, 71, 897-899.								
8.	R. B. Maretic and T. M. Atanackovic, 2001, Journal of Engineering Mechanics Vol 127, 242-247, Buckling of Column with Base Attached to Elastic Half-Space.								
9.	L. Cveticanin, R. Maretic, 2000., Mechanism a	nd Machine Theory 35	i, 1391-1411. Dyr	namic analysis of a cutting m	nechanism.				
10.	T.M. Atanackovic, R.B. Maretic, J.M. Milidragovic, 1999, Archive of Applied Mechanics 69, 94-104, On the stability of an elastic column positioned on an elastic half space.								
Sui	mmary data for teacher's scientific or art and profe	essional activity:							
Quo	tation total :	25							
Tota	l of SCI(SSCI) list papers :	14		-					
Curr	ent projects :	Domestic :	1	International:	0				

# A STUDIO S

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Marković Milan			
Acad	lemic title:				Guest Professor			
1	e of the insting date:	itution v	vhere the te	acher works full time and	-			
-	ntific or art f	ield:			Computer Science			
	lemic carie		Year	Institution	Computer Co	01100	Field	
Acad	lemic title e	ection:						
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
1.	E233	Interne	et Networks				tware Engineering and Information Technologies, luate Academic Studies	
							tware Engineering and Information Technologies - Indergraduate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	F501	WEB [	Design			( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
	1 001	***				( F10) Engineering Animation, Undergraduate Academic Studies		
3.	ISIT28	Inform	aciona bezt	pednost		( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies		
4.	BMI95	Introdu	uction to Co	mputer Science		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
						( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
5.	SE0001	Introduction to Programming				( P00) Prod Studies	duction Engineering, Undergraduate Academic	
						( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies		
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
6.	SE0011	Introdu	uction to So	ftware Engineering		, ,	tware Engineering and Information Technologies, luate Academic Studies	
							tware Engineering and Information Technologies - indergraduate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
7.	SE0017	Softwa	are Develop	ment Metrodologies		Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
8.	SE0024	Softwa	are Constru	ction and Testing			tware Engineering and Information Technologies, luate Academic Studies	
0.	020024	CORWA	oftware Construction and Testing				tware Engineering and Information Technologies - Indergraduate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
9.	SE239A	Web programming					tware Engineering and Information Technologies, luate Academic Studies	
							tware Engineering and Information Technologies - Indergraduate Academic Studies	

## ASSTUDIO POR STANDARD STANDARD

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programme name, study type				
				( E20) Computing and Control Engineering, Master Academic Studies				
10.	E2522	Software Standardization and Qualit	( MR0) Measurement and Control Engineering, Master Academic Studies					
10.	E2522	Software Standardization and Qualit	у	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies					
11.	SEM009	Identity Management		( SE0) Software Engineering and Information Technologies, Master Academic Studies				
12.	SEM017	Information Security		( SE0) Software Engineering and Information Technologies, Master Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
Sur	nmary data	for teacher's scientific or art and profe	essional activity:					
Quot	ation total :							
Total	of SCI(SS	CI) list papers :				_		
Curre	ent projects	):	Domestic :		International :			



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:				Mezei D. Ivan					
Acad	lemic title:				Assistant Pro	fessor			
		titution v	vhere the te	eacher works full time and		chnical Scie	ences - Novi Sad		
	ng date:				01.02.2002				
	ntific or art f		Vara	Lange City at a second	Electronics		Find		
	lemic carie		Year	Institution			Field		
	lemic title e	lection:	2012	Faculty of Technical Sci			Electronics		
	thesis		2012	Faculty of Technical Sci			Electronics		
	ster thesis	_	2005	Faculty of Technical Sci			Electronics		
	elor's thesis		1999	Faculty of Technical Sci			Electronics		
List	of courses b	eing ne	ld by the te	acher in the accredited stu	udy programme	es I			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	E136	Introdu	uction to Mi	crocomputer Electronics		Ùndergrad	easurement and Control Engineering,		
						(E10) Pow   Engineerin	er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
	<b>-</b> 400.1		5.			(MR0) Me	easurement and Control Engineering, luate Academic Studies		
2.	E136d	Introdu	action to Dig	gital and Microcomputer E	lectronics		er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
						( H00) Med	chatronics, Undergraduate Academic Studies		
3.	EM300A	Microp	orocessor E	lectronics			easurement and Control Engineering, luate Academic Studies		
							E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
_	E140054						easurement and Control Engineering, luate Academic Studies		
4.	EM305A	Digital	Microcontr	ollers			er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
5.	ETI02	Electro	onics and T	elecommunication Develo	pment Tools		E02) Electronics and Telecommunications, Undergraduate Professional Studies		
6.	ETI13	Electro 3	onics and T	elecommunication Develo	pment Tools	( E02) Elec Profession	ctronics and Telecommunications, Undergraduate lal Studies		
7.	ETI17	Compl	lex Digital S	System Design		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate lal Studies		
8.	ETI24	Real T	ime Embed	dded Systems		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate lal Studies		
9.	DE400S	Compl	lex Digital S	Systems and High Frequer	ncy Circuits		ver, Electronic and Telecommunication ng, Specialised Academic Studies		
10.	DE401S	Desigr	n of Applica	tion Specific Integrated Ci	rcuits		ver, Electronic and Telecommunication ng, Specialised Academic Studies		
11.	EM502	Advan	ced Microp	rocessor Systems		, ,	er, Electronic and Telecommunication ng, Master Academic Studies		
12.	SI025	Select	ed Topics i	n Computer Electronics			ver, Electronic and Telecommunication ng, Specialised Professional Studies		
13.	EM501A	Multip	rocessor sy	stems		' '	er, Electronic and Telecommunication ng, Master Academic Studies		
Rep	oresentative	e reffere	nces (minin	num 5, not more than 10)					
1.				enović I.: Robot to Robot: agazine, 2010, Vol. 17, No			of Coordination in Robot Wireless Networks , IEEE 9932		
2.	Liu H., Malbaša V., Mezei I., Nayak A., Stojmenović I.: "Coordination in Sensor, Actuator and Robot Networks", In: Wireless								
3.	3. Mezei I.: Aukcijski agregacioni algoritmi za izbor izvršioca u bežičnim multihop mrežama elektronskih senzora i aktuatora, 2012								
4.	Formalna	a specifi	kacija i real	izacija laboratorijskog mik	roračunara na	programabil	Inom integrisanom kolu		
	4. Formalna specifikacija i realizacija laboratorijskog mikroračunara na programabilnom integrisanom kolu								

## THE STUDION OF THE ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative references (minimum 5, not more than 10)							
5.	Lukić M., Mezei I.: Distributed Distance Sensit science, 2012, No 7363, pp. 436-449, ISSN 03		ce Discovery in I	Dense WSAN, Lecture i	notes in computer			
6.	Mezei I., Struharik R.: Sistem za prenos video signala baziran na korišćenju FPGA tehnologije, Tehnika - Elektrotehnika, 2010, Vol. 3, pp. 71-74, ISSN 0013-5836, UDK: 321.391.81							
7.	Daniel Mihajlović, Ivan Mezei, Miodrag Brkić, Miloš Živanov, Miloš Slankamenac: A System for Monitoring Well Logging Parameters, Advances in Electrical and Computer Engineering, 2006, Vol. 6(13), No. 1(25), str. 39- 41, ISSN 1582-7445.							
8.	Gašparović B., Mezei I.: Auction Aggregation Protocols for Agent-based Task Assignment in Multi-hop Wireless Sensor and Robot Networks, 10. IEEE/ASME International Conference on Advanced Intelligent Mechatronics, Budimpešta: IEEE/ASME, 3-7 Jul, 2011							
9.	Mezei I., Janićijević N.: Decision Making Base 29 April, 2011, pp. 1-4	d on Localized Auction	ns in Wireless Se	ensor Networks, 8. EUR	OCON, Lisabon, 27-			
10.	Milan Nikolić, Veljko Malbaša, Goran Latiško, Ivan Mezei: Hardware and device driver for the Relay Assistant, rađeno za: Test Laboratories International, College Station, Texas, USA, korisnik: Razne elektroprivrede u svetu, 2001.							
Sur	mmary data for teacher's scientific or art and profe	essional activity:						
Quot	tation total :	9						
Tota	l of SCI(SSCI) list papers :	1						
Curr	ent projects :	Domestic :	1	International:	2			

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Mihailović P. Biljana			
	emic title:				Assistant Professor			
Name	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				15.03.1999			
Scier	Scientific or art field:					Mathematics		
Acad	emic carie	er	Year	Institution			Field	
Acad	emic title e	lection:	2010	Faculty of Technical Science	ences - Novi S	ad	Mathematics	
PhD	thesis		2009	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
Magi	ster thesis		2003	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
Bach	elor's thesi	S	1998	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
List c	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E135	Probal	oility, Statis	tics and Stochastic Proces	sses	Ùndergrad	asurement and Control Engineering, uate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
							nputing and Control Engineering, Undergraduate	
2.	E212	Mathematical Analysis 1					tware Engineering and Information Technologies, uate Academic Studies	
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
		Discrete Mathematics and Linear Algebra				( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
3.	E213					( MR0) Measurement and Control Engineering,     Undergraduate Academic Studies     ( SE0) Software Engineering and Information Technolo Undergraduate Academic Studies		
0.								
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
		1A Drobability and Stanbartic Processes				( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
4.	E224A					( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
	LZZŦA	TTODA	Probability and Stochastic Processes			( SE0) Soft Undergrad	tware Engineering and Information Technologies, uate Academic Studies	
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
5.	EOS07	Mathe	matics 2				ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
							chanization and Construction Engineering, uate Academic Studies	
6.	M102	Mathe	matics 1			Académic		
	.,,,,,,						chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
7.	E102	Mathe	matical Ana	alvsis 1		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
				, 5	1 616		( MR0) Measurement and Control Engineering, Undergraduate Academic Studies	
8.	BMI91	Mathe	matics 1			( BM0) Biomedical Engineering, Undergraduate Academic Studies		
9.	BMI92	Mathematics 2				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	st of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name attidy time				
	ID	Course name	Study programme name, study type				
10.	E102A	Mathematical Analysis 1	( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
11.	IM1423	Financial Mathematics	(I20) Engineering Management, Undergraduate Academic Studies				
			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies				
			( I12) Industrial Engineering, Specialised Academic Studies				
12.	DZ01MS	Selected Chapters in Mathematics	( I22) Engineering Management, Specialised Academic Studies				
			( Z00) Environmental Engineering, Specialised Academic Studies				
12	1004/S	Statistical Quantitative Matheda	( I20) Engineering Management, Specialised Professional Studies				
13.	1004/5	Statistical Quantitative Methods	( IB0) Engineering Management - MBA, Specialised Professional Studies				
14.	OIR009	Primenjena aktuarska matematika	( I20) Engineering Management, Specialised Professional Studies				
15.	ZR503	Statistical Advanced Models	( Z01) Safety at Work, Master Academic Studies				
16.	D0M07	Mathematical Foundations of Fuzzy Systems	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
17.	D0M21	Fuzzy Systems and Their Applications	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
18.	D0M49	Aggregation Functions	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
19.	D0M50	Fuzzy Measures and Integrals	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
20.	D0M51	Large Deviations Principles	( OM1) Mathematics in Engineering, Doctoral Academic Studies				
			( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies				
			( E20) Computing and Control Engineering, Doctoral Academic Studies				
			( F00) Graphic Engineering and Design, Doctoral Academic Studies				
			( F20) Engineering Animation, Doctoral Academic Studies				
			( G00) Civil Engineering, Doctoral Academic Studies				
			( GI0) Geodesy and Geomatics, Doctoral Academic Studies				
21.	DZ01M	Selected Chapters in Mathematics	( H00) Mechatronics, Doctoral Academic Studies				
			( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies				
			( M00) Mechanical Engineering, Doctoral Academic Studies				
			( M40) Technical Mechanics, Doctoral Academic Studies				
			( OM1) Mathematics in Engineering, Doctoral Academic Studies				
			( S00) Traffic Engineering, Doctoral Academic Studies				
			( Z00) Environmental Engineering, Doctoral Academic Studies				
			( Z01) Safety at Work, Doctoral Academic Studies				
Rej	presentative	e refferences (minimum 5, not more than 10)					
1.		B. Mihailović: A representatation of a comonotone-v-addit Systems 155, (2005) 77-88	ive and monotone functional by two Sugeno integrals, Fuzzy				
2.		lović, E. Pap: Sugeno integral based on absolutely monoto 0) 2857-2869	ne real set functions, Fuzzy Sets and Systems, Vol 161, Issue				
$\dashv$		,					

Datum: 18.12.2012 Strana 305

B. Mihailović, E. Pap: Asymmetric integral as a limit of generated Choquet integrals based on absolutely monotone real set

B. Mihailović, E. Pap: Asymmetric general Choquet integrals, Acta Polytechnica Hungarica, Volume 6, Issue Number 1, (2009)

functions, Fuzzy Sets and Systems 181, (2011) 39-49.

161-173.

## LESTAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)							
5.	Kalina M., Manzi M., Mihailović B.: Choquet integrals and T-supermodularity, E. Pap (Ed.): Intelligent Systems: Models and Applications, TIEI 3, DOI: 10.1007/978-3-642-33959-2 4 c Springer-Verlag Berlin Heidelberg , (2013 ) 61-75.							
6.	B. Mihailović, Lj. Nedović, T. Grbić : The induced Sugeno integral-based operator w.r.t bi-fuzzy measures, Journal of Electrical Engineering, Vol.54, No. 12/s, (2003) 76-79.							
7.	7. B. Mihailović, E. Pap: Non-monotonic set functions and general fuzzy integrals, Proceedings of SISY 2008, Subotica, (2008) 371-374.							
8.	B. Mihailović: On the class of symmetric S-separable aggregation functions Proceedings of AGOP 2007, Ghent, Belgium, (2007) 187-191.							
9.	B. Mihailović, E. Pap: Decomposable signed fu 265-269.	ızzy measures, Procee	edings of EUSFLA	AT 2007, Ostrava, Czech Re	public, (2007)			
10.	B. Mihailović, M. Manzi: On the asymmetric SI	hilket-like integral, Pro	ceedings of AGO	P2011, Benevento, Italy, (20	11) 73-77.			
Sur	Summary data for teacher's scientific or art and professional activity:							
Quot	ation total :	10						
Total	of SCI(SSCI) list papers :	4						
Current projects : Domestic : 2 International : 0								



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name: Mihajlović					R. Dragan		
Acad	lemic title:				Associate Pro	ofessor		
		itution v	vhere the te	eacher works full time and		chnical Sciences - Novi Sad		
-	ng date:				24.09.1990			
							ce and Informatics	
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	ection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
PhD	thesis		1988	Faculty of Electrical Eng	ineering - Sara	ijevo	Applied Computer Science and Informatics	
Bach	elor's thesi	3	1973	Faculty of Electrical Eng			Applied Computer Science and Informatics	
Magi	ster thesis		1070	Faculty of Electrical Eng	ineering - Sara	ijevo	Electrical and Computer Engineering	
List o	of courses b	eing hel	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	AU54	Geoinf	ormation S	ystems		Academic		
						Studies	desy and Geomatics, Undergraduate Academic	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
2.	E243	Human Computer Interaction					tware Engineering and Information Technologies, luate Academic Studies	
						( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
3.	GI029	Utility Information Systems and their Application				Studies	desy and Geomatics, Undergraduate Academic	
4.	GI205	Information Systems and Databases				( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
						Academic		
5.	RI43A	Databa	ases 1		( ES0) Power Software Engineering, Undergraduate Academic Studies			
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
6.	RI43B	Databa	ases 2			( E20) Computing and Control Engineering, Undergraduate Academic Studies		
						( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies		
						Academic		
						( ES0) Power Software Engineering, Undergraduate Academic Studies		
7.	RI4A	Comp	uter Graphic	cs		( F10) Engineering Animation, Undergraduate Academic Studies		
							tware Engineering and Information Technologies, luate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
8.	0RI43B	Databa	ases 2			Àcadémic		
9.	BM118E	Databa	ases			Studies	medical Engineering, Undergraduate Academic	
10.	E0243	Humar	n-Computer	· Interaction		( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies	
	10. L0243		Human-Computer Interaction			Studies	jineering Animation, Undergraduate Academic	
11.	EE417A	Databa	ases				er, Electronic and Telecommunication ng, Undergraduate Academic Studies	

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programme name, study type				
			( E20) Computing and Control Engineering, Master Academic Studies					
12.	E2505	Multimedia Systems		( ES0) Power So Studies	ftware Engineering, Master	Academic		
		•		(F20) Engineerii	ng Animation, Master Acade	mic Studies		
				( SE0) Software Master Academic	Engineering and Information c Studies	n Technologies,		
12	E2516	Virtual Basility Systems		(E20) Computing Academic Studie	g and Control Engineering, <b>f</b> es	Master		
13.	E2516	Virtual Reality Systems	( SE0) Software Engineering and Information Technologies, Master Academic Studies					
14.	FDS151	Selected Chapters in Multimedia		( F00) Graphic Engineering and Design, Doctoral Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
1.	Mihajlovi	ć D.,Informacioni sistemi i projektovan	je baza podataka, FTI	N Novi Sad, 1998				
2.	Mihajlovi	ć D, Obradović D,Jedan algoritam saž	imanja srpskohrvatski	h reči, Informatika	a br 4, pp45-47, 1982			
3.	Mihajlovi	ć D, Obradović D, An evalution of text	ual documents indexir	ig methods, Yujor	, 1992, pp107-112.			
4.	Mihajlovi	ć D i ostali, Softversko rešenje za farn	naceutski informacioni	sistem, Diskobolo	os 97.			
5.	Mihajlovi	ć D, Kecman Ž, Farmaceutski informa	cioni sistem, I kongres	farmaceuta Jugo	oslavije, Vrnjačka Banja, 199	)4		
6.	Mihajlovi	ć D, Izbor parova leksičkih jedinica iz	poznatog rečnika za a	utomatizovano po	stavljanje relacija u tezaurus	su		
7.	Mihajlovi	ć D, Odredjivanje vrsta reči iz srpskoh	rvatskog jezika primer	nom računara, Info	ormatica, br 1, pp52-54, 198	38		
8.		, Obradović D, Mihajlović D, Standard Standardizacija i kvalitet u informacion			nacionih sistema software-ir	nženjerski		
9.		ć D, Nićin V, Prilog razvoju automastk Novi Sad	e obrade informacija ι	INDOK-delatnos	ti u organima uprave, Dani ir	nformatike 80,		
10.	Obradovi	ć D, Perišić B, Mihajlović D, Konjović	Z, Stanje i trendovi u μ	orojektovanju infor	rmacionih sistema, IPME, Be	eograd, 1992		
		for teacher's scientific or art and profe	essional activity:					
<b>—</b>	ation total :							
	Total of SCI(SSCI) list papers :							
Curre	Current projects : Domestic : International :							

## THE STUDIOR ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:					Milanović V. Jovica			
Acad	emic title:					Guest Profes	sor		
-	e of the inst	itution v	vhere the te	acher works full tin	ne and	-			
Scier	ntific or art f	ield:				Electroenergetics			
Acad	emic carie	er	Year	Institution				Field	
Acad	emic title e	ection:	2010	Faculty of Techni	cal Sci	ences - Novi S	ad	Electroenergetics	
PhD	thesis		1996					Electrical and Computer Engineering	
Magi	ster thesis		1991					Electrical and Computer Engineering	
Bach	elor's thesi	8	1987					Electrical and Computer Engineering	
List o	of courses b	eing he	ld by the tea	acher in the accred	lited stu	udy programme	es		
	ID	Course	e name				Study pro	gramme name, study type	
1.	EE0406	Electri	c Power Qu	ality				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE406	Electri	c Power Qu	ality				er, Electronic and Telecommunication g, Master Academic Studies	
3.	B. DE513 Advanced Methods of Monitoring and Mana				d Mana	agement	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
Rep	Representative refferences (minimum 5, not more than 10)								
1.				anda and J.V.Milan Power Systems. 2				r – Voltage Controller for Multi Machine Power	
2.				/.Milanovic. Monito /ery. 2012; 27(2): 9			ole Estimation	on of Voltage Sags in Power Networks. IEEE	
3.				ovic. Ranking the Ir ems. 2012 Februar			nous Gener	ators for Integration of Wind Generation. IEEE	
4.				Statistical Estimati ery. 2012 August;			Level of Vol	tage Unbalance in Distribution Networks. IEEE	
5.				ovc. Techno-Econo tion. IEEE Transac				es to Operation of Power Systems with High 7(3): 1414-1421	
6.				F.M.Hughes. Valida ps. IEEE Transacti				Power System Dynamic Studies Based on WRS-00411-2009	
7.				. Gobal minimisatio			lue to voltag	ge sags with FACTS based devices. IEEE	
8.				. Modelling of FAC ery. 2010 Novemb			e Sag Mitig	ation Studies in Large Power Systems. IEEE	
9.	M.Kayiko Transacti	i and J.\ ons on	V.Milanovic. Power Syst	. Dynamic contribu ems. 2009 May; 24	tion of 1(2): 85	DFIG based wi 9-867	nd plants to	system frequency disturbances. IEEE	
10.	J.Y.Chan	, J.V.Mi	lanovic and		eric Fa	ilure Risk Asse	ssment of Ir	ndustrial Processes due to Voltage Sags. IEEE	
Sur	Summary data for teacher's scientific or art and professional activity:								
	ation total :				0				
Total	of SCI(SS	CI) list p	apers :		0				
Curre	ent projects				Dome	estic :	0	International · 0	

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:			Milanović N. Nikola				
	lemic title:				Assistant Pro			
Nam	e of the inst	itution v	vhere the te	acher works full time and				
starti	ng date:							
Scie	Scientific or art field:			Applied Computer Science and Informatics				
	lemic caries		Year	Institution			Field	
Acad	lemic title el	ection:	2010	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics	
PhD	thesis		2003				Applied Computer Science and Informatics	
Bach	elor's thesis	3	1995				Applied Computer Science and Informatics	
Magi	ster thesis		-				Applied Computer Science and Informatics	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	F209	Multim	nedia			( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
2.	ISIT21	Interne	et mreže				vare and Information Technologies (Inđija), luate Professional Studies	
3.	ISIT2D	Web d	esign				vare and Information Technologies (Inđija), luate Professional Studies	
							tware Engineering and Information Technologies, luate Academic Studies	
4.	SE0008	Algorit	hms and Da	ata structures		( SEL) Software Engineering and Information Technolo Loznica, Undergraduate Academic Studies		
							er, Electronic and Telecommunication ng, Undergraduate Academic Studies	
5.	SE0016	Databa	3000			( SE0) Software Engineering and Information Technologies Undergraduate Academic Studies		
J.	320010	Databa	a3C3			( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
6.	SES102	Noso	L Data Bas	00			tware Engineering and Information Technologies, luate Academic Studies	
0.	SES 102	NUSQ	L Dala Basi	es		( SEL) Software Engineering and Information Technolog Loznica, Undergraduate Academic Studies		
7	SES201	Advan	and Mah T	o abpologica		( SE0) Sof Undergrad	tware Engineering and Information Technologies, luate Academic Studies	
7.	SES201	Auvan	ced web 1	echnologies			tware Engineering and Information Technologies - Indergraduate Academic Studies	
8.	SES302	Lliah T	-ochnology	Managament			tware Engineering and Information Technologies, luate Academic Studies	
0.	3E3302	riigii i	ecrinology	Management		( SEL) Sof Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
						( E20) Cor Academic	nputing and Control Engineering, Master Studies	
9.	E2506	Advan	ced Interne	t Infrastructure			tware Engineering and Information Technologies, ademic Studies	
						(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
						( E20) Cor Academic	nputing and Control Engineering, Master Studies	
10.	E2513	Semantic Web			( PM0) Production Engineering, Master Academic Studies			
							tware Engineering and Information Technologies, ademic Studies	

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programm	me name, study type					
			( E20) Computing and Control Engineering, Master Academic Studies							
				( MR0) Measure Academic Studie	ment and Control Engineerings	ng, Master				
11.	E2519	Domain-Specific Languages		( PM0) Production	on Engineering, Master Acad	lemic Studies				
				( SE0) Software Master Academi	Engineering and Information c Studies	Technologies,				
				(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies						
12.	E2526	Service Oriented Architectures	( E20) Computing and Control Engineering, Master Academic Studies							
12.	E2520	Service Offented Architectures		( SE0) Software Master Academi	Engineering and Information c Studies	Technologies,				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.	N. Miland	ovic, M. Malek. Current Solutions for V	Veb Service Compositi	on. IEEE Internet	Computing, 8(6):51-59, 200	4. (SCI 11/86)				
2.		ovic, M. Malek, A. Davidson, V. Milutin (SCI 16/86)	ovic. Routing and Sec	urity in Mobile Ad	Hoc Networks. IEEE Compl	uter, 37(2):61-				
3.		ovic, M. Malek. Search Strategies for A n, 3(2):1-32, 2006. (SCI 37/86)	Automatic Web Service	e Composition. Int	ternational Journal of Web S	ervices				
4.	N. Miland 4(1):56-6	ovic, B. Milic. Automatic Generation of 9 , 2011	Service Availability Me	odels. IEEE Trans	sactions of Service Computir	ng, 2010.				
5.		N. Milanovic, J. Richling, V. Stantche ssue on Embedded Systems, 152(5):2			oots Community. IEE Procee	edings Software,				
Sur	nmary data	for teacher's scientific or art and profe	essional activity:							
Quot	ation total :	<u> </u>	0	·	<u> </u>					
Total	of SCI(SS	CI) list papers :	0							
Curre	ent projects	:	Domestic :	0	International :	0				

## ZE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Milosavljev			Milosavljević	ć P. Branko				
Acad	lemic title:				Associate Pro	rofessor		
		itution v	vhere the te	acher works full time and		chnical Sciences - Novi Sad		
<b>—</b>	ng date:	اماء:			01.10.1998	t C-i	and Information	
	Scientific or art field: Applied Con  Academic carieer Year Institution					outer Science	ce and Informatics	
			2009	Faculty of Technical Sci	onoco Novi S	od.	Applied Computer Science and Informatics	
	lemic title el	ection.	2009	Faculty of Technical Sci				
			1999	Faculty of Technical Sci			Applied Computer Science and Informatics  Applied Computer Science and Informatics	
<b>─</b>	ster thesis elor's thesis		1999	Faculty of Technical Sci			Applied Computer Science and Informatics  Applied Computer Science and Informatics	
				acher in the accredited stu			Applied Computer Science and Informatics	
2.00	ID		e name		ady programme		ogramme name, study type	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
1.	E2E40	XML a	nd WEB Se	ervices		Ùndergrad	easurement and Control Engineering, luate Academic Studies	
		&	5			Ùndergrad	tware Engineering and Information Technologies, luate Academic Studies	
						Loznića, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
		E2E41 E-Business Systems Security				( E20) Computing and Control Engineering, Undergraduate Academic Studies		
2.	E2E41					Undergrad	easurement and Control Engineering,	
						Ùndergrad	tware Engineering and Information Technologies, luate Academic Studies	
						Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
3.	F209	Multim	edia			Academic		
4.	F214I2	Raster	Graphics			( F00) Graphic Engineering and Design, Undergraduate Academic Studies		
5.	GI100	Comp	uter Practic	um		( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
6.	RI41	Interne	et Software	Architectures		( E20) Computing and Control Engineering, Undergraduate Academic Studies		
7.	SEI41	Interne	et Software	Architectures		Ùndergrad	tware Engineering and Information Technologies, luate Academic Studies	
						Loznića, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
8.	ISIT03	Introdu	uction to Pro	ogramming		Ùndergrad	vare and Information Technologies (Inđija), luate Professional Studies	
9.	ISIT08	Object	oriented pr	ogramming fundamentals	•	Ùndergrad	vare and Information Technologies (Inđija), luate Professional Studies	
10.	ISIT22	Osnov	e baza pod	ataka		Ùndergrad	vare and Information Technologies (Inđija), luate Professional Studies	
11.	ISIT28	Inform	aciona bezl	pednost		Ùndergrad	vare and Information Technologies (Inđija), luate Professional Studies	
12.	ISIT29	XML T	echnologie	s		Ùndergrad	vare and Information Technologies (Inđija), luate Professional Studies	
13.	BMI95	Introdu	uction to Co	mputer Science		( BM0) Biomedical Engineering, Undergraduate Academic Studies		
14.	EIWDS	Web-b	ased Meas	urement and Data Acquis	ition Systems	Undergrad	easurement and Control Engineering, luate Academic Studies	
			The saled measurement and sale requisition eyes			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		

## LANAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes			
	ID	Course name	Study programme name, study type	
	SE0001	Introduction to Programming	( F00) Graphic Engineering and Design, Undergraduate Academic Studies	
15.			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies	
			( P00) Production Engineering, Undergraduate Academic Studies	
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies	
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies	
	E2506	Advanced Internet Infrastructure	( E20) Computing and Control Engineering, Master Academic Studies	
16.			( SE0) Software Engineering and Information Technologies, Master Academic Studies	
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies	
17.	F402	Electronic Publishing	( F00) Graphic Engineering and Design, Master Academic Studies	
	E2521	Business Process Management	( E20) Computing and Control Engineering, Master Academic Studies	
40			( MR0) Measurement and Control Engineering, Master Academic Studies	
18.			( SE0) Software Engineering and Information Technologies, Master Academic Studies	
			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies	
19.	E2526	Service Oriented Architectures	( E20) Computing and Control Engineering, Master Academic Studies	
19.			( SE0) Software Engineering and Information Technologies, Master Academic Studies	
20.	DE417	Web-based Measurement Systems	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies	
21.	DRNI02	Selected Topics in Advanced Software Architecture	( E20) Computing and Control Engineering, Doctoral Academic Studies	
22.	DRNI03	Selected Topics in Internet-Based Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies	
23.	DRNI06	Selected Topics in Digital Archives	( E20) Computing and Control Engineering, Doctoral Academic Studies	
24.	FDS151	Selected Chapters in Multimedia	( F00) Graphic Engineering and Design, Doctoral Academic Studies	
25.	FDS152	Selected Topics in Computer Graphics	( F00) Graphic Engineering and Design, Doctoral Academic Studies	
26.	FDS224	Selected Chapters in Programming	( F00) Graphic Engineering and Design, Doctoral Academic Studies	
27.	DRNI19	Selected Topics in Information Security	( E20) Computing and Control Engineering, Doctoral Academic Studies	
Rep	Representative refferences (minimum 5, not more than 10)			
1.	Branko Milosavljević. Models for Extensible Multimedia Document Retrieval. In IEEE 6th International Symposium on Multimedia Software Engineering, Miami, FL, 2004.			
2.	Branko Milosavljević, Milan Vidaković, Srđan Komazec, and Gordana Milosavljević. User Interface Code Generation for Data- Intensive Applications with EJB-Based Data Models. In Software Engineering Research and Practice (SERP"03), Las Vegas, NV 2003.			
3.	Branko Milosavljević and Zora Konjović. Design of an XML-Based Extensible Multimedia Information Retrieval System. In IEEE Multimedia Software Engineering (MSE2002), Newport Beach, CA, 2002. pp. 114-121.			
4.	G. Sladić, B. Milosavljević, Z. Konjović. Extensible Access Control Model for XML Document Collections, Intl. Conf. on Security and Cryptography ICETE-SECRYPT"07, Barcelona, Spain, 2007.			
5.	Branko Milosavljević, Milan Vidaković, and Zora Konjović. Automatic code generation for database-oriented web applications. In James Power and John Waldron, editors, Recent Advances in Java Technology: Theory, Application, Implementation, pages 89-98. Trinity College Dublin, 2003.			

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10) Danijela Tešendić, Branko Milosavljević, and Dušan Surla. A library circulation system for city and special libraries. The Electronic Library, 27(1):162-186, 2009. ISSN: 0264-0473, DOI: 10.1108/02640470910934669. Jelena Radjenović, Branko Milosavljević, and Dušan Surla. Modelling and implementation of catalogue cards using FreeMarker. 7 Program: electronic library and information systems, 43(1):62-76, 2009. ISSN: 0033-0337, DOI: 10.1108/00330330910934110. Milan Vidaković, Branko Milosavljević, Zora Konjović, and Goran Sladić. Extensible Java EE-based agent framework and its application on distributed library catalogues. Computer Science and Information Systems (ComSIS), 6(2):1-28, 2009. ISSN: 1820-8. 0214, DOI: 10.2298/csis0902001V. Aleksandar Kovačević, Branko Milosavljević, Zora Konjović, and Milan Vidaković. Adaptive content-based music retrieval system. 9 Multimedia Tools and Applications, 47(3):525-544, 2010. ISSN: 1380-7501, DOI: 10.1007/s11042-009-0336-2. Bojana Dimić, Branko Milosavljević, and Dušan Surla. XML schema for UNIMARC and MARC 21. The Electronic Library, 10 28(2):245-262, 2010. ISSN: 0264-0473, DOI: 10.1108/02640471011033611. Summary data for teacher's scientific or art and professional activity: Quotation total: 0 Total of SCI(SSCI) list papers : 15 Current projects Domestic: 2 International:



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	ame and last name: Milošević S. Vladimir							
Acad	cademic title: Full Profess					or		
						chnical Sciences - Novi Sad		
	starting date: 20.10.1976						21. 15.	
	ntific or art f			1 000	l elecommun	cations and	Signal Processing	
	lemic caries		Year	Institution			Field	
	lemic title el	ection:	1997	Faculty of Technical Sci			Telecommunications and Signal Processing	
	thesis		1984	School of Electrical Engi			Telecommunications and Signal Processing	
	ster thesis		1980	Faculty of Technical Sci			Telecommunications and Signal Processing	
	elor's thesis		1976	School of Electrical Engi			Computer Engineering	
LIST	of courses b	eing nei	id by the te	acher in the accredited stu	udy programme	es ————————————————————————————————————		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EK300	Digital	Modulation	ns .			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EK430	Funda	mentals of	Radio and Mobile Commu	inications	Ùndergrad	tal Traffic and Telecommunications, uate Academic Studies	
3.	SK300	Princip	oles of Digit	al Communications		Ùndergrad	tal Traffic and Telecommunications, uate Academic Studies	
4.	E137	Basics	of Telecon	nmunications		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EK320	Principles of digital communications				Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EK453	EK453 SCADA Systems Design				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	EK457	EK457 Principles of radio communication					er, Electronic and Telecommunication g, Undergraduate Academic Studies	
8.	EK461					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	S1328P	Princip	oles of digita	al modulations			tal Traffic and Telecommunications, uate Academic Studies	
10.	DE211S	Savrer	mene tehnik	ke prenosa digitalnih signa	ala		ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EK536	Coding	g Technique	es			er, Electronic and Telecommunication g, Master Academic Studies	
12.	EK541	Mobile	Communic	cations			er, Electronic and Telecommunication g, Master Academic Studies	
13.	SI045	Pristup	one tehnolo	gije - DSL, KDS			ver, Electronic and Telecommunication g, Specialised Professional Studies	
14.	DE211	Conter	mporary Te	chniques of Digital Signal	Transmission		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.			stić, "Effect I.25 No.6, p		n with median f	lter on bina	ry digital receiver performance", IEE Electronic	
2.			V.Milošević e 1997, p.16	•	ng concept bas	sed on Hada	amard matrices", IEEE Signal Processing Letters,	
3.	3. S.Kostić, V.Milošević, " Analysis of Increasing HFHPTA Efficiency using Composite Signals", IEEE Transaction CAS1, 2003.							
4.				, "Effect on combined impressitatis",series :Electronic			ejection with median filter on binary digital receiver vol. 9, No. 2, p.219-227	
5.				Radenković, V.Šenk, "PIP nic and energetics, Niš 19			oise supression in still images", Facta 52	
6.				ović, Vladimir Milošević i d vetković, prof. dr Dušan D		rada govorr	nog signala", Novi Sad 1996. (recenzenti:	
7.				e influence of intersymbol ne channel" IEEE Melecor			pise on the transmission of M-ary data signal 810.2	
8.	B.Ristić,	√.Miloš∈	ević, "Impul	se noise rejection in binar	y receiver usin	g median filt	er", ISSPA 90, Gold Coast Australia 1990	

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

- 9. V.Milošević,V.D.Delić, V.Šenk, "Hadamard transform application in speech scrambling "IEEE DSP97 13th International conference on digital signal processing, 2-4 July 1997., Santorini Greece
- 10. V.Delić, V.Šenk, V.Milošević, "A new speech scrambling method: comparative analysis and a fast algorithm", EUSIPCO -96 VIII

to the second trees of the second	1.2 cits, the ci						
Summary data for teacher's scientific or art and professional activity:							
Quotation total: 1							
Total of SCI(SSCI) list papers :	Total of SCI(SSCI) list papers: 3						
Current projects: Domestic: 0 International: 0							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Milovančev S. Slobodan				
	Academic title:				Associate Professor				
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad		
starting date:					01.10.1975				
Scier	Scientific or art field:				Electrical Mea	Electrical Measurements			
Acad	lemic carie	er	Year	Institution		Field			
Acad	lemic title e	lection:	2001	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
PhD	thesis		1996	Faculty of Technical Sci	ences - Novi S	ad	Cutting Processing Tools and Tribology		
Magi	ster thesis		1983	School of Electrical Engi	ineering - Beog	grad	Electrical Measurements		
Bach	elor's thesi	S	1973	School of Electrical Engi	ineering - Beog	grad	Electroenergetics		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	E142	Measu	ıring Instrun	nents		Undergrad (E10) Pow	asurement and Control Engineering, uate Academic Studies er, Electronic and Telecommunication ng, Undergraduate Academic Studies		
2.	H210	Measu	rements in	Technical Engineering		( H00) Med	chatronics, Undergraduate Academic Studies		
3.	BM119E	Techn and sy		ds and regulations for me	dical devices	( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
4.	El411	Measu	rements in	robotics		(E10) Pow Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
5.	EIEEM	Electri	cal and elec	ctronic measurements		1	( BM0) Biomedical Engineering, Undergraduate Academic		
6.	EIEEMI	Electrical and electronic measurements in i			ndustry		( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
7.	EIEKI	Electronic Components in Instrumentation					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EIEMER	Electronic measurements				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
9.	EIMMB M				nt-acquisition	Studies ( MR0) Me Undergrad (E10) Pow	rasurement and Control Engineering, luate Academic Studies er, Electronic and Telecommunication ag, Undergraduate Academic Studies		
10	EINANI) (	Mana				(MR0) Me	asurement and Control Engineering, uate Academic Studies		
10.	EIIVINV	weasu	irements or	non-electrical quantities			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
11.	EIPMS2		n and develo	opment of industrial devic tems 2	es and	Undergrad	asurement and Control Engineering, uate Academic Studies er, Electronic and Telecommunication		
							ng, Undergraduate Academic Studies		
12.	EIPR1	Labora	atory practic	cum			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
13.	EISMP	Senso	rs and trans	sducers		Undergrad	asurement and Control Engineering, uate Academic Studies		
						Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
14.	MR0UL R	Introdu	uction to lab	oratory practice		Ùndergrad	asurement and Control Engineering, luate Academic Studies		
15.	DE305S	Electri	cal Measure	ements in Power Systems	3	Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
16.	EIMIO	Measi	irement svs	tems in industrial environi	ment	Academic			
					-	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies			

## THE STUDION OF THE ST

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name		Study programme name, study type			
17.	7. DE305 Electrical Measurements in Power Systems (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies					ation	
Rep	oresentative	e refferences (minimum 5, not more th	an 10)				
1.		nčev, G.Pavkov, "Additional Losses in 2001 Winter Meeting, Columbus, Ohio		nductor Due to Ed	dy-Currents", IEEE Power E	ngineering	
2.		ov, G.Pavkov, S.Milovančev, "Fault Lo ECH EUROPE 2001, Berlin, German		V Networks with a	Resistive Grounded Neutra	l",	
3.		v, D.Cvetinov, S.Milovančev:"The Rea ing Society T&D 2002, Sao Paulo, Bra	,	g Grid Impedance	in High Voltage Substations	s", IEEE Power	
4.		v, S.Milovančev, D.Cvetinov:"An Anali d 3th WAE", Rio de Janeiro, Brasil, N		rent Distribution (	Over Grounding Conductor",	IEEE GROUND	
5.		vančev, V.V.Vujičić, V.A.Katić: "Improv r", IEEE T Power Delivery, Vol. 10, No			stribution System Using a Ne	w Adding A/D	
6.		ki, L.Hodolič, V.Vujučić, S.Milovančev ^{2,} pp. 408-411, April 1997.	:"Power Factor Calibra	ator", IEEE Trans.	Instrumentation and Measu	rement, vol. IM-	
7.		, I.Župunski, S.Milovančev:"Predeterm Meas., vol. IM-46, No. 2, pp. 439-441,		ation Error in Digi	tal Measurement Systems",	IEEE Trans.	
8.		, S.Milovančev, M.Pešaljević, D.Pejić, strum.Meas., vol. 48, No.2, pp. 467-47		uency Stochastic	True RMS Instrument", IEE	E	
9.	S. Milovančev, V. Vujičić, V. Katić, D. Dapčević: "Monitoring of PWM Regulated Drives - An Accuracy Improvement", International Conference on Electrical Drives and Power Electronics - EDPE"94, Stara Lesna-High Tatras (Slovakia), Oct.1994, pp.502-506.						
10.	V. Vujičić, S. Milovančev, I. Župunski, D. Pejić: "Proposal of a new measurement technology", 3rd International Syimposium Interdisciplinary Regional Research (Hungary, Romania, Yugoslavia), pp. 95-97. Part I, September 1997.						
Sur	Summary data for teacher's scientific or art and professional activity:						
Quot	Quotation total: 8						
Total	Total of SCI(SSCI) list papers : 4						
Curre	Current projects : Domestic : 1 International : 0						

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Academic title:  Name of the institution where the teacher works full time and Faculty of Technical Sciences - Novi Sad starting date:  Sidentific or art field:  Academic careier  Academic strile election:  2010   Faculty of Technical Sciences - Novi Sad   English    Academic strile election:  2010   Faculty of Technical Sciences - Novi Sad   English    Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English    Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English    Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English    List of courses being held by the teacher in the accredited study programmes    D	Name and last name:					Mirović Đ. Ivana			
starting date:    Countilion and field:   English									
starting date:    D10.4 1990    Scientific or art field:   English     Academic carieer   Year   Institution   English     Academic carieer   Year   Institution   English     Academic title election:   2010   Faculty of Technical Sciences - Novi Sad   English     Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English     Last of courses being held by the teacher in the accredited study programmen name, study type			titution v	vhere the te	acher works full time and				
Academic tatle election: 2010 Faculty of Technical Sciences - Novi Sad English Bachelor's thesis: 1984 Faculty of Technical Sciences - Novi Sad English List of courses being held by the teacher in the accredited study programmes  ID Course name Study programme name, study type  1. AEJ1L English Language - Elementary (A00) Architecture, Undergraduate Academic Studies 2. AEJ2L English Language intermediate (A00) Architecture, Undergraduate Academic Studies 3. AEJ2Z English Language - upper intermediate (A00) Architecture, Undergraduate Academic Studies 4. AEJ3Z English Language - upper intermediate (A00) Architecture, Undergraduate Academic Studies (G00) Civil Englishering, Undergraduate Academic Studies (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M30) Energy and Process Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (M90) Technical Mechanics and Technical Design, Undergraduate Academic Studies (S00) Traffic and Transport Engineering, Undergraduate Academic Studies (S00) Traffic and Transport Engineering, Undergraduate Academic Studies (S00) Traffic and Transport Engineering, Undergraduate Academic Studies (F00) Graphic Engineering, Undergraduate Academic Studies (F00) Graphic Engineering, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies (F00) Graphic Engineering, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies (F00) Graphic Engineering and Desi	starti	ng date:				01.04.1990			
Academic title election: 2010   Faculty of Technical Sciences - Novi Sad   English   Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English   List of courses being held by the teacher in the accredited study programmes    ID   Course name   Study programme name, study type    1. AEJ1L   English Language - Elementary   (A00) Architecture, Undergraduate Academic Studies   2. AEJ2L   English Language intermediate   (A00) Architecture, Undergraduate Academic Studies   3. AEJ2Z   English intermediate   (A00) Architecture, Undergraduate Academic Studies   4. AEJ3Z   English Language - upper intermediate   (A00) Architecture, Undergraduate Academic Studies   4. AEJ3Z   English Language - upper intermediate   (A00) Architecture, Undergraduate Academic Studies   4. AEJ3Z   English Language - Elementary   (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies   4. AEJ3Z   English Language - Elementary   (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies   5. EJ01L   English Language - Elementary   (M20) Prophical Mechanics and Technical Design, Undergraduate Academic Studies   6. (S00) Traffic and Transport Engineering, Undergraduate Academic Studies   7. (E10) Power, Electronic and Telecommunications   8. (E10) Power, Electronic and Telecommunication   9. (P00) Graphic Engineering and Design, Undergraduate Academic Studies   9. (P00) Graphic Engineering and Design, Undergraduate Academic Studies   9. (P00) Graphic Engineering Studies   9. (P00) Graphic Engineering Studies   9. (P00) Graphic Engineering and Design, Undergraduate Academic Studies   9. (P00) Graphic Engineering, Und	Scientific or art field:					English			
Bachelor's thesis   1984   Faculty of Philosophy - Novi Sad   English	Acad	emic caries	er	Year	Institution			Field	
List of courses being held by the teacher in the accredited study programmes    ID   Course name   Study programme name, study type	Acad	emic title el	lection:	2010	Faculty of Technical Sci	ences - Novi Sa	ad	English	
ID   Course name	Bach	elor's thesis	S	1984	Faculty of Philosophy - N	Novi Sad		English	
1. AEJ1L English Language - Elementary (A00) Architecture, Undergraduate Academic Studies (G00) Civil English Language - upper intermediate (A00) Architecture, Undergraduate Academic Studies (G00) Civil Englineering, Undergraduate Academic Studies (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M30) Energy and Process Engineering, Undergraduate Academic Studies (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies (P00) Production Engineering, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies (M60) Measurement and Control Engineering, Undergraduate Academic Studies (201) Safety at Work, Undergraduate Academic Studies (201) Safety at Work, Undergraduate Academic Studies (201) Safety at Work, Undergraduate Academic Studies (201) Engineering, Undergraduate Academic Studies (201) Engineering, Undergraduate Academic Studies (201) Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (M80) Mechanization and Construction Engi	List c	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
2. AEJZL English Language intermediate (A00) Architecture, Undergraduate Academic Studies 4. AEJZZ English intermediate (A00) Architecture, Undergraduate Academic Studies 4. AEJZZ English Language - upper intermediate (A00) Architecture, Undergraduate Academic Studies (G00) Civil Englineering, Undergraduate Academic Studies (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies (M30) Energy and Processe Engineering, Undergraduate Academic Studies (M30) Energy and Processe Engineering, Undergraduate Academic Studies (M30) Tentrical Mechanics and Technical Design, Undergraduate Academic Studies (M30) Traffic and Transport Engineering, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies (S01) Postal Traffic and Telecommunication Engineering, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies (F00) Graphic Engineering and Design, Undergraduate Academic Studies (IND) Measurement and Control Engineering, Undergraduate Academic Studies (Z01) Safety at Work, Undergraduate Academic Studies (Z02) English Language - Elementary (Z01) Safety at Work, Undergraduate Academic Studies (Z02) English Language - Elementary (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (Z02) English Language - Elementary (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommuni		ID	Course	e name			Study programme name, study type		
3. AEJ2Z English intermediate (A00) Architecture, Undergraduate Academic Studies 4. AEJ3Z English Language - upper intermediate (A00) Architecture, Undergraduate Academic Studies 6. GOO) Civil Engineering, Undergraduate Academic Studies 7. EJ02L English Language - Elementary (A00) Architecture, Undergraduate Academic Studies 7. EJ02L English Language - Elementary (A00) Architecture, Undergraduate Academic Studies 8. (A00) Architecture, Undergraduate Academic Studies 9. (M30) Energy and Process Engineering, Undergraduate Academic Studies 9. (M30) Energy and Process Engineering, Undergraduate Academic Studies 9. (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies 9. (P00) Production Engineering, Undergraduate Academic Studies 9. (S00) Traffic and Transport Engineering, Undergraduate Academic Studies 9. (S00) Traffic and Telecommunication, Undergraduate Academic Studies 9. (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and Control Engineering, Undergraduate Academic Studies 9. (Z01) Safety at Work, Undergraduate Academic Studies 9. (Z01) English Language - Elementary 1. EJ02L English Language - Elementary 2. (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies 9. (Z01) English Engineering, Undergraduate Academic Studies 9. (Z01) English Language - Elementary 1. EJ02L English Language - Pre-Intermediate 2. EJ02L English Language - Pre-Intermediate 3. (A00) Mechanization and Construction Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and Control Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and Control Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and Control Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and Control Engineering, Undergraduate Academic Studies 9. (MR0) Measurement and	1.	AEJ1L	Englisl	h Language	e - Elementary		( A00) Arch	nitecture, Undergraduate Academic Studies	
4. AEJ3Z English Language - upper intermediate  (A00) Architecture, Undergraduate Academic Studies  (G00) Civil Engineering, Undergraduate Academic Studies  (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies  (M30) Energy and Process Engineering, Undergraduate Academic Studies  (P00) Production Engineering, Undergraduate Academic Studies  (S01) Pastal Traffic and Telecommunications, Undergraduate Academic Studies  (S01) Postal Traffic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (MR0) Measurement and Control Engineering, Undergraduate Academic Studies  (Z00) Clean Energy Technologies, Undergraduate Academic Studies  (Z00) Elasser Risk Management and Fire Safety, Undergraduate Academic Studies  (Z00) Engineering, Undergraduate Academic Studies  (Z00) Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies  (M20) Mech	2.	AEJ2L	Englisl	h Language	intermediate		( A00) Arch	nitecture, Undergraduate Academic Studies	
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Academic Studies  ( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies  (Z20) Environmental Engineering, Undergraduate Acader Studies  ( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  ( F00) Graphic Engineering and Design, Undergraduate Academic Studies  ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies  ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies  ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies  ( Z01) Safety at Work, Undergraduate Academic Studies  ( ZC0) Clean Energy Technologies, Undergraduate	6.	EJ01Z	Englisl	h Language	e - Elementary		( Z01) Safety at Work, Undergraduate Academic Studies		
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Engineering, Undergraduate Academic Studies  ( F00) Graphic Engineering and Design, Undergraduate Academic Studies  ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies  ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies  ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies  ( Z01) Safety at Work, Undergraduate Academic Studies  ( ZC0) Clean Energy Technologies, Undergraduate							(Z20) Environmental Engineering, Undergraduate Academic Studies		
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7. EJ02L English Language – Pre-Intermediate  Undergraduate Academic Studies  ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies  ( Z01) Safety at Work, Undergraduate Academic Studies  ( ZC0) Clean Energy Technologies, Undergraduate									
7. EJ02L English Language – Pre-Intermediate Undergraduate Academic Studies ( Z01) Safety at Work, Undergraduate Academic Studies ( ZC0) Clean Energy Technologies, Undergraduate									
( ZC0) Clean Energy Technologies, Undergraduate	7.	EJ02L	Englisl	h Language	e – Pre-Intermediate				
							( Z01) Safe	ety at Work, Undergraduate Academic Studies	
Academic Studies							( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies									
(Z20) Environmental Engineering, Undergraduate Acader Studies							(Z20) Environmental Engineering, Undergraduate Acader		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	of courses b	eing held by the teacher in the accredited study programme	es
	ID	Course name	Study programme name, study type
			( I10) Industrial Engineering, Undergraduate Academic Studies
8.	EJ02Z	English Language – Pre-Intermediate	( 120) Engineering Management, Undergraduate Academic Studies
0.	L3022	English Language – Fre-intermediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies
			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies
9.	EJ03Z	English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies
			( Z01) Safety at Work, Undergraduate Academic Studies
10.	EJ04L	English Language – Upper Intermediate	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies
			(Z20) Environmental Engineering, Undergraduate Academic Studies
			( E20) Computing and Control Engineering, Undergraduate Academic Studies
			( ES0) Power Software Engineering, Undergraduate Academic Studies
			( F10) Engineering Animation, Undergraduate Academic Studies
11.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies
			(AH0) Architecture, Master Academic Studies
			( E20) Computing and Control Engineering, Undergraduate Academic Studies
			( F10) Engineering Animation, Undergraduate Academic Studies
12.	EJ2L	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies

## TAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List c	ist of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
13.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
14.	EJ3L	English Language – Advanced	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
15.	EJE5	English Language – First Certificat 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
16.	EJE6	English Language - First Certificate 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
17.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies				
18.	EJEI1	English in Engineering 1	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
19.	EJEI2	English in Engineering 2	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
20.	EJF5	English Language for GRID 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
21.	EJF6	English Language for GRID 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
22.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies				
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies				
23.	EJM	English Language – ESP Course	( M30) Energy and Process Engineering, Undergraduate Academic Studies				
20.	LOW	Eligiisti Laliguage – Loi Goulse	( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies				
			( P00) Production Engineering, Undergraduate Academic Studies				
24.	EJPST	English Language in Postal Traffic	( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies				
25.	EJSIT	English Language in Traffic and Transport	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies				
26.	EJZ	English Language - Specialized	(Z20) Environmental Engineering, Undergraduate Academic Studies				
27.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
28.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
29.	ISIT07	English Language 2	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies				
30.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies				

## STAS STUDIOS S

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Study programme name, study type	List o	List of courses being held by the teacher in the accredited study programmes					
Semilian   English   Eng		ID	Course name	Study programme name, study type			
Studies   Stud	31.	ASI431	English Language 2				
Studies  34. EJIIM English for Specific Purposes  [10] Industrial Engineering, Undergraduate Academic Studies [12] English Ianguage - Elementary  [13] English Ianguage - Elementary  [14] English Ianguage - Elementary  [15] English Ianguage - Elementary  [16] English Ianguage - Elementary  [16] English Ianguage - Elementary  [17] English English Ianguage - Elementary  [18] English Language - Elementary  [18] English Language - Elementary  [19] English English English Language - Elementary  [19] English Language - Elementary  [19] English English English Language - Elementary  [19] English Language - Elementary  [19] English English Language - Elementary  [19] English English Language - Elementary  [19] English	32.	BMI80	English 1				
Studies   Stud	33.	BMI81	English 2				
Studies   Stud	34.	EJIIM	English for Specific Purposes	Studies			
Professional Studies  (E20) Computing and Control Engineering, Undergraduate Academic Studies  (ES0) Power Software Engineering, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (GI0) Geodesy and Geomatics, Undergraduate Academic Studies  (GI0) Geodesy and Geomatics, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies  (AH0) Architecture, Master Academic Studies  (F20) Computing and Control Engineering, Undergraduate Academic Studies  (F20) Power Software Engineering, Undergraduate Academic Studies  (F20) Power Software Engineering, Undergraduate Academic Studies  (F20) Power Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SE0) Softwa			<b>3</b>				
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Studies  Studies  (GIO) Geodesy and Geomatics, Undergraduate Academic Studies  (SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SEC) Software Engineering and Information Technologies, Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies  (AHO) Architecture, Master Academic Studies  38. eja English Language – a Specialized Course  (AHO) Architecture, Master Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies  (F00) Graphic Engineering and Design, Master Academic Studies  (F01) Foot English Language for GRID 3  (F00) Graphic Engineering and Design, Master Academic Studies  (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for							
Studies (SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies (AHO) Architecture, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (F00) Graphic Engineering and Design, Master Academic Studies (F10) Foor English Language for GRID 3 (F00) Graphic Engineering and Design, Master Academic Studies (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for							
Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies  (AHO) Architecture, Master Academic Studies  (ED) Power, Electronic and Telecommunication Engineering, Master Academic Studies  (FOO) Graphic Engineering and Design, Master Academic Studies  (FOO) Graphic Engineering and Design, Master Academic Studies  (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for	37.	EJ2Z	English Language – Intermediate				
Loznica, Undergraduate Academic Studies (AH0) Architecture, Master Academic Studies  38. eja English Language – a Specialized Course (AH0) Architecture, Master Academic Studies  39. EJE7 English Language - Advanced (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies  40. F507 English Language for GRID 3 (F00) Graphic Engineering and Design, Master Academic Studies  41. NIT03 Business English (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. Jimirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for							
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39. EJE7 English Language - Advanced (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies  40. F507 English Language for GRID 3 (F00) Graphic Engineering and Design, Master Academic Studies  41. NIT03 Business English (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  6. V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for				(AH0) Architecture, Master Academic Studies			
F507 English Language - Advanced Engineering, Master Academic Studies  (F00) Graphic Engineering and Design, Master Academic Studies  (F00) Graphic Engineering and Design, Master Academic Studies  (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for	38.	eja	English Language – a Specialized Course	(AH0) Architecture, Master Academic Studies			
40. F507 English Language for GRID 3 Studies  41. NIT03 Business English (NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  6. V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for	39.	EJE7	English Language - Advanced				
Representative refferences (minimum 5, not more than 10)  1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević  2. Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004  3. Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007  4. Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011  5. I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  6. V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008  7. I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for	40.	F507	English Language for GRID 3	1, ,			
<ol> <li>Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević</li> <li>Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004</li> <li>Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007</li> <li>Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011</li> <li>Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	41.	NIT03	Business English				
<ol> <li>Prevod publikacije o Fakultetu tehničkih nauka, Faculty of Technical Sciences, 2004</li> <li>Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007</li> <li>Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011</li> <li>I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	Rep	Representative refferences (minimum 5, not more than 10)					
<ol> <li>Vesna Bogdanović i Ivana Mirović: Engleski jezik 1 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2007</li> <li>Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011</li> <li>I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	1.	1. Prevod monografije: Nenad Teofanov: Ultramodulation Spaces and Pseudodifferential Operators, Zadužbina Andrejević					
<ol> <li>Ivana Mirović i Vesna Bogranović: Engleski jezik 2 za grafičko inženjerstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011</li> <li>I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	2.						
<ol> <li>I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	3.						
<ol> <li>I. Mirović, V. Bogdanović, B. Ličen: Istorijat nastave stručnog engleskog jezika na FTN u Novom Sadu. međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008</li> <li>I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for</li> </ol>	4.	Ivana Mir	ović i Vesna Bogranović: Engleski jezik 2 za grafičko inženj	erstvo i dizajn, FTN izdavaštvo, Novi Sad, 2011			
V. Bogdanović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski jezik za studente različitog predznanja, međunarodna konferencija Jezik struke, teorija i praksa, Beograd, 2008     I. Mirović, B. Ličen, V. Bogdanović: Summarization skills of engineering students reading in a second language, Language for	5.	I. Mirović	, V. Bogdanović, B. Ličen: Istorijat nastave stručnog englesl				
	6.	V. Bogda	nović, I. Mirović, B. Ličen: Kreiranje udžbenika za engleski j	iezik za studente različitog predznanja, međunarodna			
	7.	I. Mirović	, B. Ličen, V. Bogdanović: Summarization skills of engineeri	ing students reading in a second language, Language for			

## TE STUDIO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10)

- Mirović I, Gak D., Bogdavović V.: Trust me I'm an engineer or: Why we should challange our students with demanding tasks, 5th International Conference on the Importance of Learning Professional Foreign Languages for Communication between Cultures, Celje, Slovenia, 2012
- Gak D, Bogdanović V, Mirović I, : Questionnaire an instrument for collecting valuable data from teachers of business English courses, 5th International Conference on the Importance of Learning Professional Foreign Languages for Communication between Cultures, Celje, Slovenia, 2012

between Cultures, Celje, Slovenia, 2012						
Summary data for teacher's scientific or art and professional activity:						
Quotation total :	0					
Total of SCI(SSCI) list papers :	0					
Current projects :	Domestic :	0	International :	0		

## STORY SALVER

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

	Name and last name:				Mitrović Lj. Zoran			
Academic title:			Associate Professor					
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starting date:			20.04.1994					
Scier	ntific or art f	ield:			Electrical Mea	Electrical Measurements		
Acad	lemic cariee	er	Year	Institution			Field	
Acad	lemic title el	ection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements	
PhD	thesis		2004	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements	
Magi	ster thesis		1992	School of Electrical Engi			Electrical and Computer Engineering	
Bach	elor's thesis	3	1984	School of Electrical Engi	ineering - Beog	ırad	Electronics	
List	of courses b	eing hel	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E142	Measu	iring Instrun	nents		Undergrad	asurement and Control Engineering, luate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	El411	Measu	rements in	robotics			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EIDMS1			ased measurement and da	ata	Ùndergrad	asurement and Control Engineering, uate Academic Studies	
		acquis	ition systen	15 (		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
4.	EIDMS2			ased measurement and da				
7.	LIDIVIOZ	acquisition systems 2			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
5.	EIPDMS	Progra Systen		leasurement and Data Ac	equisition		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EIPMS1			opment of industrial device	es and		asurement and Control Engineering, uate Academic Studies	
<u> </u>		measu	rement sys	tems 1		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	EIPMS2			opment of industrial device	es and	Undergrad	asurement and Control Engineering, uate Academic Studies	
		measu	rement sys	tems z		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
8.	EIPR1	Labora	atory praction	cum			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
9.	EISMP	Senso	rs and trans	sducers			asurement and Control Engineering, luate Academic Studies	
J.	LIGIVII	GCH30	io and traffs				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	EIWDS	Weh-h	ased Meas	urement and Data Acquis	ition Systems		asurement and Control Engineering, luate Academic Studies	
10.	LIVVDS	Web-based Measurement and Data Acquisi		ori Oysteilis		er, Electronic and Telecommunication g, Undergraduate Academic Studies		
11.	EZ302	Measu	rement sys	tems in clean power sour	ces	( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
12.	MR0UL R	Introdu	uction to lab	oratory practice			asurement and Control Engineering, luate Academic Studies	
13.	DE504S	Contemporary Measuring Systems Design				(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
14.	E1SO01	Moder	n technolog	jies in electrical engineerir	ng		ver, Electronic and Telecommunication g, Specialised Professional Studies	

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name		Study program	me name, study type		
15.	EIDNU	Supervisory Control and Data Acqui	sition Systems	( MR0) Measurement and Control Engineering, Master Academic Studies			
13.	LIDINO	Design			ectronic and Telecommunica ester Academic Studies	ation	
16.	EIMIO	Measurement systems in industrial e	environment	( MR0) Measure Academic Studie	ment and Control Engineeries	ng, Master	
10.	LIIVIIO	weasurement systems in industrial c	Silvinoriiiiciit	, , ,	ectronic and Telecommunica ester Academic Studies	ation	
17.	EIMRV1	Real Time Measurements		( MR0) Measure Academic Studie	ment and Control Engineeries	ng, Master	
17.	LIMITY	rteal fille weasurements			ectronic and Telecommunica ester Academic Studies	ation	
18.	DE504	Contemporary Measuring Systems I	Design	<b>'</b>	ectronic and Telecommunic ctoral Academic Studies	ation	
Rep	resentative	refferences (minimum 5, not more th	an 10)				
1.		Mitrović Z., Vujičić V.: Method for Har nts with InternallyGenerated Referenc 15-8871					
2.	Zoran Mit 559-564.	rović: "A Phase Angle Standard", Me	asurement Science ar	d Technology No	. 15. Institute of Physics , Ja	anuary 2004,	
3.		., Milovančev S., Župunski I.: A Prec gy, 2009, Vol. 20, No 6, pp. 1-3	sision Power Amplifier	for Calibration Sy	stems, Measurement Scien	ce and	
4.	Santrač E Signal-to- 9456	3., Sokola M., Mitrović Z., Župunski I., Noise Ratio, IEEE Transactions on Ir	Vujičić V.: A Novel M nstrumentation and Me	ethod for Stochas easurement, 2009	stic Measurement of Harmon , Vol. 58, No 10, pp. 3434-3	nics at Low 441, ISSN 0018-	
5.	Trkuljić N System a 07:621.39	., Babić Z., Marković R., Peruničić G. t the Institute of Oncology and Radiol 9(497.11)	, Sarić M., Spasić Joki ogy of Serbia, Medica	ć V., Mitrović Z.: I Data, 2011, No	Implementation of the Mode 1, pp. 69-72, ISSN 1821-158	ern PACS 85, UDK: 616-	
6.		Z., Spasić Jokić V.: Introduction in Picand Communications in Medicine), M					
7.	Zoran Mit	rović, Ivan Župunski:"Stable Source o	of AC Voltage and Cur	rent", IMTC Confe	erence, Como, Italy, 2004.		
8.	Nagy K. Wijičić V. Mitrović Z. Takace M.: Euzzyfication and magazyroment using stochastic approach. Z. SISV. International						
9.							
10.	P. Milianić Z. Mitrović I. Župunski. V. Vujižić: "Ka povom stalogu naizmoničnog napoga, struje, električna spago i energije i faktora						
Sun	nmary data	for teacher's scientific or art and profe	essional activity:				
Quota	ation total :		0				
Total	of SCI(SSC	CI) list papers :	4				
Curre	Current projects : Domestic : 3 International : 0						



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name: Naď F. Laslo							
Acad	Academic title: Associate F					ofessor		
7				acher works full time and	Faculty of Te	chnical Sciences - Novi Sad		
					01.05.1977			
	ntific or art f				Electronics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2008	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
PhD	thesis		1992	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
Magi	ster thesis		1983	Faculty of Electronic En			Electronics	
Bach	elor's thesi	S	1977	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EM304	Impuls	e and Digit	al Electronic Circuits		Undergrad	asurement and Control Engineering, uate Academic Studies	
		<u>'</u>				Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EM436	Mecha	tronics			Àcadémic		
3.	EM440	Comp	uter-Aided I	Electronic Circuit Design		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	H305	Analou	igue Electro	onics		( H00) Med	chatronics, Undergraduate Academic Studies	
5.	H309	Impuls	Electronics	3		( H00) Mechatronics, Undergraduate Academic Studies		
						( H00) Med	chatronics, Undergraduate Academic Studies	
6.	H311	Application of Sensors and Actuators				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
7.	BMI110	Sensors and actuators in medicine				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
8.	ВМІ99	BMI99 Electronics				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
9.	E138A	Digital	Electronics	·			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	EM301A	Analog	g Microelec	tronic Circuits		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
11.	EM436A	Mecha	itronics			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
12.	DE400S	Compl	ex Digital S	ystems and High Frequer	ncy Circuits	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
13.	DE501S	Select	ed Chapter	s in Pulse and Analogue E	Electronics		ver, Electronic and Telecommunication g, Specialised Academic Studies	
14.	EM530	Select	ed Chapter	s in Impulse Electronics			er, Electronic and Telecommunication g, Master Academic Studies	
15.	SI032	Select	ed Chapter	s in Mechatronics			ver, Electronic and Telecommunication g, Specialised Professional Studies	
16.	BMIM1B	EMI ar	nd EMC in r	medicine equipment		(BM0) Bio	medical Engineering, Master Academic Studies	
17.	EM406A	High-F	requency [	Digital Systems and Circui	ts		er, Electronic and Telecommunication g, Master Academic Studies	
18.	DE400	Compl	ex Digital S	ystems and High Frequer	ncy Circuits		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
19.	DE501	Select	ed Chapter	s in Pulse and Analogue E	Electronics		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Padacayliquió C. Živapov I.i. Smotana W. Marió A. Unger M. Nad I.: A Wireless Embedded Decement Prossure Soprar							
2.	L. Juhas,	A. Vuja	nić, N. Ada	mović, L. Nagy, B. Borova			ositioning Based on Piezo-Legs", The Journal of	
	Mechatronics, Vol. 11 (2001), pp.869-897.							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



I/C	presentative renerences (minimum 5, not more th	all 10)					
3.	Damnjanović M., Živanov Lj., Nađ L., Đurić S., Inductive Sensor , IEEE Transactions on Magn				of Displacement		
4.	Nađ L., Radić J., Đugova A., Videnović-Mišić M Generator, Informacije MIDEM - Journal of mic						
5.	Đurić S., Nađ L., Damnjanović M., Đurić N., Živ International, 2011, Vol. 28, No 1, pp. 41-49, IS		olication of planar-	type meander sensors, Micr	oelectronics		
6.	Radić J., Đugova A., Nađ L., Videnović-Mišić M.: Feedback Influence on Performance of Ring Oscillator for IR-UWB Pulse Generator in 0.18µm CMOS technology, 28. International Conference on Microelectronics – MIEL, Niš: IEEE, 13-16 Maj, 2012, pp. 357-360, ISBN 978-1-4673-0235-7, UDK: 10.1109/MIEL.2012.6222873						
7.	Nað L., Babković K., Krklješ D., Borovac B.: Elastic Foot Contact Force Sensor System — Pendulum Application Example, 14.  International Power Electronics and Motion Control Conference EPE-PEMC, Ohrid, 6-9 Septembar, 2010, pp. 38-38, ISBN 978-1-4244-7856-9						
8.	Babković K., Nađ L., Krklješ D.: Optical Senso International Conference on Microelectronics –						
9.	Radić J., Đugova A., Nađ L., Videnović-Mišić N Generator in 0.18µm CMOS technology , 47. Ir Systems and Tehnologies - ICEST, Veliko Trno	nternational Scientific	Conference on Inf				
10.	Krkješ D., Babković K., Naď L.: Specific Conductance Characteristic of Force Sensing Resistor (FSR) with Custom Made Single-gap Conductive Contacts, 2. ICMAST-International Conference on Materials and Applications for Sensors and Transducers, Budapest, 24-28 Mai, 2012						
Sur	mmary data for teacher's scientific or art and profe	essional activity:					
Quot	tation total :	6					
Tota	l of SCI(SSCI) list papers :	5					
Curr	ent proiects :	Domestic :	3	International:	1		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:			Nimrihter D. Miroslav				
Acad	lemic title:				Associate Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				01.06.1976			
Scie	Scientific or art field: Electroene					etics		
Acad	Academic carieer Year Institution						Field	
Acad	lemic title el	lection:	2009				Electroenergetics	
PhD	thesis		1994	School of Electrical Engi	ineering - Beog	ırad	Electroenergetics	
Magi	ster thesis		1984	School of Electrical Engi	ineering - Beog	ırad	Electroenergetics	
Bach	elor's thesis	S	1975	School of Electrical Engi	ineering - Beog	ırad	Electroenergetics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EE309	Power	Distribution	n Systems			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE409	High V	oltage Eng	ineering			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EE413	Power	System Re	eliability			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EE309	Power	Distribution	n Systems			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	ESI020	Data structures and algorithms in power systems			stems	(ES0) Power Software Engineering, Undergraduate Academic Studies		
6.	DE106S	Reliability of Power Systems			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
7.	DE112S	Non-deterministic Modelling				ver, Electronic and Telecommunication g, Specialised Academic Studies		
8.	EE560	Planiranje elektroenergetskih sistema			Engineerin	er, Electronic and Telecommunication g, Master Academic Studies		
9.	EE409M	High Voltage Engineering				er, Electronic and Telecommunication g, Master Academic Studies		
10.	EM435A	Electro	onic System	s in Oil Industry		(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
11.	EM437A		oplication of able energy	electronic systems in clear	an and	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
12.	ESI022	Quality	control an	d assurance of electric po	wer software	( ES0) Pov Studies	wer Software Engineering, Master Academic	
13.	ESI024	Applie	d algorithm	s in power systems		( ES0) Pov Studies	wer Software Engineering, Master Academic	
14.	ESI025	Simula	ation of Pow	ver Greed critical mission	systems	( ES0) Pov Studies	wer Software Engineering, Master Academic	
15.	ESI027	Advan	ced cloud c	omputing in power systen	ns	( ES0) Pov Studies	wer Software Engineering, Master Academic	
16.	ESI030	Distrib Grids	uted Softwa	are Architectures for Smar	t Energy	( ES0) Pov Studies	wer Software Engineering, Master Academic	
17.	ESI031		ess Intellige Systems	nce and Data Warehouse	Systems in	( ES0) Pov Studies	wer Software Engineering, Master Academic	
18.	ESI035	Compi	uter graphic	algorithms for smart grid	systems	( ES0) Pov Studies	wer Software Engineering, Master Academic	
19.	ESI038	Servic	e oriented a	architectures in Smart Grid	1	( ES0) Pov Studies	wer Software Engineering, Master Academic	
20.	DE106	Reliab	ility of Powe	er Systems		Engineerin	ver, Electronic and Telecommunication ng, Doctoral Academic Studies hthematics in Engineering, Doctoral Academic	
21.	DE112	Non-d	eterministic	Modelling	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
Rer	oresentative	reffere	nces (minin	num 5, not more than 10)		, <u>J</u>	<u> </u>	
	2		(	.,				



Current projects :

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

TUDIES Power, Electronic and Telecommunication Engineering

12

UNDERGRADUATE ACADEMIC STUDIES

Rep	Representative refferences (minimum 5, not more than 10)							
1.	Gušavac S., Nimrihter M., Gerić Lj.: ESTIMAT Vol. 78, pp. 566-583	ION OF OVERHEAD LINE CONDITION, , Electric Power System Research, 2008,						
2.		M.: Comparative Characteristics of Thick-Film Integrated LC Filters, IEEE ment, 2002, Vol. 51, No 4, pp. 570-576, ISSN 0018-9456						
3.	Nimrihter M.: Comparative Analysis of Security Concepts for Urban Meddium Voltage Cable Distribution Networks, Electric Power System Research, 1994, No 29, pp. 43-50, ISSN 0378-7796							
4.	Popović D., Glamočić Lj., Nimrihter M.: The Optimal Automation Level of Medium Voltage Distribution Networks, International Journal of Electrical Power							
5.	Nimrihter M.: Comparative Analysis of Security Concepts for Urban Medium Voltage Cable Distribution Networks, Electric Power Research, 1994, No 29, pp. 43-50							
6.	Nimrihter M., Živanov M., Gušavac S.: FUEL CELLS – ECOLOGICAL COGENERATIVE ENERGY SOURCES, 9th INTERNATIONAL SYMPOSIUM INTERDISCIPLINARY REGIONAL RESEARCH – ISIRR 2007, , Novi Sad, 21-22 Jun, 2007							
7.	*****Živanov M., Nimrihter M., Živanov Lj.: Energetska efikasnost sistema sa gorivnim ćelijama Naziv skupa: Međunarodno savetovanje ENERGETIKA 2007, UDK: UDC 621.311.29.001.5/.004:620.92							
8.	*****Živanov M., Nimrihter M., Živanov Lj.: Efe 2007, UDK: 621.311.29.001.5/.004:620.92	kti primene gorivnih ćelija Naziv skupa: Međunarodno savetovanje ENERGETIKA						
9.	*****Nimrihter M., Gušavac S., Lukić J., Kuljić R.: Uticaj distribuiranih generatora na rizik u SN DEM, edukativni softver za potrebe							
10.	*****Nimrihter M., Gušavac S., Lukić J.: Uticaj International Symposium on Power Electronics	distribuiranih protočnih elektrana na rizik napajanja potrošača Naziv skupa: 14. -Ee2007, UDK: 621.38; 620.9(082)						
Sur	mmary data for teacher's scientific or art and profe	essional activity:						
Quot	tation total :	22						
Total of SCI(SSCI) list papers: 5								

3

International:

Domestic:



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Novak O. Ladislav				
Academic title:			Full Professor						
Nam	e of the inst	titution v	vhere the te	eacher works full time	e and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:					01.09.1976			
Scie	ntific or art f	ield:		I		Electronics			
Academic carieer Year Institution						Field			
Acad	lemic title el	lection:	1994	Faculty of Technica				Electronics	
	thesis		1982	School of Electrica	<u>_</u>			Electrical and Computer Engineering	
	ster thesis		1978	School of Electrica				Electrical and Computer Engineering	
	elor's thesis		1975	School of Electrica				Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredit	ed stu	udy programme	es I		
	ID	Course	e name				Study pro	ogramme name, study type	
1.	E128F	Electri	cal Circuit ⁻	Гһеогу				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	e141	Syster	ns and Sigi	nals			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EM402	Algorit	hms and C	omplexity			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	E128A	Electri	cal Circuit ⁻	Гһеогу			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EM302A	Discrete-time systems and signals				Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
6.	EM420A	Modelling and simulation of RF and microway			ave circuits		er, Electronic and Telecommunication g, Undergraduate Academic Studies		
7.	DE200S	Algorithms and Complexity-an Advanced Course			ourse		ver, Electronic and Telecommunication g, Specialised Academic Studies		
8.	DE300S	Randomised Approximation Algorithms					ver, Electronic and Telecommunication g, Specialised Academic Studies		
9.	EM518A	Advanced simulation techniques of RF and mid circuits			microwave	' '	er, Electronic and Telecommunication g, Master Academic Studies		
10.	DE200	Algorit	hms and C	omplexity-an Advand	ced C	ourse		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
11.	DE300	Rando	mised App	roximation Algorithm	ıs		( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minir	num 5, not more thar	n 10)				
1.	Novak L., Theoretic	, Gibbor al Com	ns A.: Hybri puter Scien	d Graph Theory and ce (No. 49), 1999, st	Netw tr. 1-1	ork Analysis, C 88, ISBN 0521	Cambridge U 461170	Iniverity Press, Series: Cambridge Tracts in	
2.								er based upon a finite number of harmonics", p. 1623-1625, ISSN 0018-9840	
3.				lectual property core SSN pp.1751 - 8601	imple	ementation of d	ecision tree	s, IET Computers and Digital Techniques, 2009,	
4.		,	/ak L.: Evol I 0218-126	•	in Ha	rdware, Journa	l of Circuits	Systems and Computers, 2009, Vol. 18, No 6, pp.	
5.		,		mment on "Boolean lo 8, pp. 1067-1069	Funct	tions Classifica	tion via Fixe	ed Polarity Reed-Muller Form", IEEE Trans. on	
6.	Novak L.:	: On Go	etschel and	l Voxman fuzzy matr	oid , l	Fuzzy Sets and	Systems, 2	2001, Vol. 117, pp. 407-412	
7.				A.: Increasing efficien 47, No 1, pp. 32-37	ncy an	nd output powe	r of HFHPT/	A by injection of two harmonics, IEEE Transaction	
8.				S.: Signals with Flatte casting, 2001, Vol. 47			ance Power	Analysis of HFHPTA: Theory and Applications,	
9.				l balance power anal , No 4, pp. 547-552	lysis	of HFHPTA with	h (M,N)-com	nposite signals, IEEE Transaction on	
10.	Novak L.:	: On Fuz	zzy Indepei	ndence Set Systems	, Fuzz	zy Sets and Sy	stems, Else	vier, 1997, Vol. 91, No 2, pp. 365-374	
Sur	mmary data	for teac	her's scien	tific or art and profes	siona	I activity:			
Quot	ation total:				23				
Total of SCI(SSCI) list papers :			17						

## STAN STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering THE TOTAL PROPERTY OF THE PROP

Current projects: Domestic: 0 International: 3

## ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last r	name:			Okanović Đ. [	Dušan		
-	demic title:				Assistant Professor			
		titution v	vhere the te	acher works full time and			nces - Novi Sad	
	ing date:				01.02.2004			
Scie	ntific or art f	ield:			Applied Comp	outer Science	ce and Informatics	
Acad	demic carie	er	Year	Institution			Field	
Acad	demic title e	lection:	2012	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics	
PhD	thesis		2012	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics	
Magi	ister thesis		2006	Faculty of Technical Sci	ences - Novi Sa	ad	Computer Science	
Bach	nelor's thesi	s	2002	Faculty of Technical Sci	ences - Novi Sa	ad	Computer Science	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	:S		
	ID	Course	e name			Study pro	ogramme name, study type	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
1.	E233	Internet Networks					tware Engineering and Information Technologies, luate Academic Studies	
						( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
						er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	ISIT23	Web Programming					vare and Information Technologies (Inđija), luate Professional Studies	
3.	ISIT30	Busine	ess process	management systems			vare and Information Technologies (Inđija), luate Professional Studies	
4.	ISIT34	Identit	y Managem	ent			vare and Information Technologies (Inđija), luate Professional Studies	
5.	ISIT36	Softwa	are Develop	ment Tools		( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies		
6.	ISIT43	Config	uration and	Administration of Compu	ter Systems	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies		
7.	ISIT45	eTrade	e and eBan	king technologies and sys	tems	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies		
8.	SE0024	Coffue	oro Conotru	otion and Tooting		( SE0) Sof Undergrad	tware Engineering and Information Technologies, luate Academic Studies	
0.	3E0024	Soliwa	are Constru	ction and Testing		( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
9.	SE239A	Web p	rogrammin	9			tware Engineering and Information Technologies, luate Academic Studies	
						( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
10	ED007	Deaus	nont and ca	ntont management		( I20) Engi Studies	neering Management, Specialised Professional	
10.	EP007	Document and content management			( IB0) Engi Profession	neering Management - MBA, Specialised al Studies		
11.	AD0008	Web d	lesign in Ard	chitecture		( AD0) Digital Techniques, Design and Production in Architecture and Urban Planning, Master Academic Studies		

## THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes										
	ID	Course name		Study program	me name, study type					
				( E20) Computin Academic Studie	ng and Control Engineering, es	Master				
12.	E2522	Software Standardization and Qualit	A.	( MR0) Measure Academic Studie	ment and Control Engineeries	ng, Master				
12.	LEGEE	Software Standardization and Qualit	у	( SE0) Software Master Academi	Engineering and Information c Studies	n Technologies,				
					ectronic and Telecommunica aster Academic Studies	ation				
13.	DRNI05	Selected Topics in Software Standa	rdization and Quality	( E20) Computin Academic Studie	ng and Control Engineering, es	Doctoral				
( F20) Engineering Animation, Doctoral Acad										
Rep	resentative	refferences (minimum 5, not more th	an 10)							
1.	Okanović D., van Hoorn A., Konjović Z., Vidaković M.: SLA-Driven Adaptive Monitoring of Distributed Applications for Performance Problem Localization, Computer Science and Information Systems (ComSIS), 2012, ISSN 1820-0214									
2.	2. Dušan Okanović, Zora Konjović, Automatska inicijalizacija klasa iz XML datoteke, Zbornik radova YU INFO 2005 (CD), Kopaonik 2005.									
3.	Dušan Okanović, Milan Vidaković, Upotreba JMX MLet servisa za ažuriranje verzija Java aplikacija, Zbornik radova YU INFO 2007 (CD), Kopaonik 2007.									
4.		oradović, Milan Vidaković, Zora Konjo ", Zbornik radova YU INFO 2008 (CD		'Generator ekran	skih formi za JBoss Seam b	azirane				
5.	Dušan Ol Kopaonik	kanović, Milan Vidaković, "Primena jB 2009.	PM okruženja u imple	mentaciji eUprave	e", Zbornik radova YU INFO	2009 (CD),				
6.		Penca, Siniša Nikolić, Dušan Okanovi adova YU INFO 2009 (CD), Kopaonik		obraćaja sistemo	om za detekciju upada u mre	žu Snort",				
7.		D., Vidaković M.: Software Performa on Society Technology and Managem				ce on				
8.		D., van Hoorn A., Konjović Z., Vidako ce on Information Technology - ICIT,				nternational				
9.	Okanović	D., Konjović Z., Vidaković M.: Contin Conference on Industrial Systems - I	nuous Monitoring Syst	em for Software 0		national				
10.		D., Vidaković M.: One Implementations								
Sun		for teacher's scientific or art and profe								
Quota	ation total :		0							
Total	of SCI(SS	CI) list papers :	0							
Curre	ent projects	:	Domestic :	0	International :	0				

## DE JE

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:			Oros V. Đura				
Acad	lemic title:				Assistant Professor			
		titution v	vhere the te	eacher works full time and	,			
_	ng date:				05.11.1982			
	ntific or art f		Vasa	leatite tian	Power Electronics, Machines and Facilities			
	lemic carie		Year	Institution	- Nord O	1	Field	
	lemic title el	ection:	2009	Faculty of Technical Sci			Power Electronics, Machines and Facilities	
	thesis		2008	Faculty of Technical Sci			Electroenergetics	
<u> </u>	ster thesis nelor's thesis		1997 1982	School of Electrical Engi Faculty of Technical Science			Power Electronics, Machines and Facilities  Electroenergetics	
				acher in the accredited stu			Liectivenergetics	
LIST	Courses b	ellig lie	id by the te	acrier in the accredited sit	ady programme	:5		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	H361	Contro	of Electric	al Drives		( H00) Med	chatronics, Undergraduate Academic Studies	
							chanization and Construction Engineering, luate Academic Studies	
						( M30) End Academic	ergy and Process Engineering, Undergraduate Studies	
	M109	Electric Machines and Power Electronics					chnical Mechanics and Technical Design, luate Academic Studies	
2.						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
						( S00) Traf	ffic and Transport Engineering, Undergraduate Studies	
							tal Traffic and Telecommunications, uate Academic Studies	
							chanization and Construction Engineering, uate Academic Studies	
		Electrical Engineering and Electric Machines				( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
	M440				_		chnical Mechanics and Technical Design, luate Academic Studies	
3.	M112				:S	( P00) Prod Studies	duction Engineering, Undergraduate Academic	
						( S00) Traf Academic	ffic and Transport Engineering, Undergraduate Studies	
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies		
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
4.	E2315	Electri	cal Machine	es in Automatic Control Sy	/stems		asurement and Control Engineering, luate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EE419A	Testin	g of electric	al machines			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EE421A			and Calculation Software			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
7.	ZR405A			e harmful effects of electriver converters	icity in the	( Z01) Safe	ety at Work, Undergraduate Academic Studies	
8.	ZR43A			regulations in electrical sy	ystems	( Z01) Safe	ety at Work, Undergraduate Academic Studies	
9.	EE534			lotor Drives	-	(E10) Pow	er, Electronic and Telecommunication g, Master Academic Studies	
10.	M2541	Occup Machii		ety and Protection in Oper	ration with		chanization and Construction Engineering, Master	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programi	me name, study type				
11.	GS016	Lighting in Buildings		( G10) Energy Efficiency in Buildings, Specialised Academic Studies					
12.	ZRD235	Systemic regulation in the field of oc and health	cupational safety	( Z01) Safety at	Work, Doctoral Academic St	udies			
13.	3. ZRD236 State and development of health and safety at work in the field of electrical engineering (Z01) Safety at Work, Doctoral Academic Studies								
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.		Marčetić D., Oros Đ.: Prediction of Lor r computation and mathematics in ele				ne international			
2.		Dros, Veran V. Vasić, Darko P. Marče Electric Power Components and Syste				nce parameter			
3.		Vasić V., Marčetić D., Kulić F.: Influer f Advances in Electrical and Compute				ss scheme,			
4.	Reljić D., Vasić V., Oros Đ.: Power factor correction and harmonics mitigation based on phase shifting approach, 15. International Power Electronics and Motion Control Conference, EPE-PEMC 2012 ECCE Europe, Novi Sad, Serbia, pp. DS3b.12-1 - 12-8, ISBN: 978-1-4673-1971-3, IEEE catalog number CFP 1234A-USB								
5.	Dumnić B., Oros Đ., Milićević D., Matić D., Vasić V.: Vector Control of Induction Generator with Parallel Stator Resistance and Rotor Speed Estimation, 31. Power Electronics, Intelligent Motion, Power Quality PCIM, Nuremberg: Mesago PCIM Gmbh, 4-6 Maj, 2010, pp. 608-612, ISBN 978-3-8007-3229-6								
6.		Marčetić D., Oros Đ., Kulić F.: Predicce on Power Electronics and Applicat				3. European			
7.	on Neura	i Lj., Kulić F., Dumnić B., Oros Đ.: Fu I Network Applications in Electrical Er 210, ISBN 978-1-4244-2903-5	zzy PI Controller for V ngineering, Beograd: II	ector Control of In EEE SCG Section	nduction Machine, 9. NEURE I, CAS - SP Chair, 25-27 Se	EL- Symposium ptembar, 2008,			
8.		Vasić V., Oros Đ.: Power Quality Co 16. International Symposium on Powe							
9.	Čorba Z.: Power El	Milićević D., Adžić E., Dumnić B., Gra Modern Laboratory Tools for Experi ectronics Ee, Novi Sad: Društvo za er ehničkih nauka-Novi Sad, 28-30 Okto	mental Research in the nergetsku elektroniku-l	e Field of Electric Novi Sad, Elektrot	Drives, 15. International Syr ehnički institut "Nikola Tesla	nposium on			
10.	Motor Sp	., Vasić V., Dujić D., Oros Đ.: The Inf eed Estimation, 1. International Confe 6-19 Oktobar, 2005							
Sur	mmary data	for teacher's scientific or art and profe	· · · · · · · · · · · · · · · · · · ·						
	ation total :		3						
		CI) list papers :	4						
Curre	Current projects : Domestic : 1 International : 0								

## SSITAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:			Pantović B. Jovanka				
	lemic title:	iaiii <del>c</del> .			Full Professor			
		titution v	where the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
	ng date:	V	oro uro te	acitor works full tillic allu	13.06.1993			
Scien	ntific or art f	ield:			Mathematics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2010				Mathematics	
PhD	thesis		2000	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
Magi	ster thesis		1996	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
Bach	elor's thesi	s	1991	Faculty of Sciences - No	vi Sad		Mathematical Sciences	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E145	Opera	tions Resea	arch		Academic		
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
							nputing and Control Engineering, Undergraduate	
2.	E213	Discre	te Mathema	atics and Linear Algebra		( MR0) Me Undergrad	asurement and Control Engineering, uate Academic Studies	
2.		Discrete Mathematics and Linear Algebra					tware Engineering and Information Technologies, uate Academic Studies	
						( SEL) Software Engineering and Information Technolo Loznica, Undergraduate Academic Studies		
3.	3. E221A Mathematical Analysis 2			( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies			
		Mathematical Analysis 2				( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
4.	GI101	Algebr	a			( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
5.	H203		matics 3			<u> </u>	chatronics, Undergraduate Academic Studies	
6.	IAM002	Discre Graph		binatorial Methods for Co	mputer	( F10) Engineering Animation, Undergraduate Academic Studies		
7.	S053N	Opera	tions resea	rch		Academic		
							tal Traffic and Telecommunications, uate Academic Studies	
8.	0M512	Model	s of Compu	tation		( OM1) Ma Studies	thematics in Engineering, Master Academic	
9.	0ML512	Model	s of Compu	tation		( OM1) Ma Studies	thematics in Engineering, Master Academic	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
10.	DZ01MS	Select	ed Chapters	s in Mathematics		( I22) Engi Studies	neering Management, Specialised Academic	
						( Z00) Env Studies	ironmental Engineering, Specialised Academic	
11.	D0M08	Applie	d Abstract A	Algebra		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
12.	D0M13	Theory	of Mobile	Processes		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
13.	D0M14	Proces	ss Algebra			( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
14.	D0M22	Multipl	e-Valued L	ogic		( OM1) Mathematics in Engineering, Doctoral Academic Studies		

## THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study program	me name, study type					
15.	D0M23	Clone Theory		( OM1) Mathema Studies	atics in Engineering, Doctor	al Academic				
			(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies							
				( E20) Computin Academic Studie	g and Control Engineering, es	Doctoral				
				( F00) Graphic E Studies	ingineering and Design, Do	ctoral Academic				
				( F20) Engineeri	ng Animation, Doctoral Aca	demic Studies				
				( G00) Civil Engi	neering, Doctoral Academic	Studies				
				( GI0) Geodesy	and Geomatics, Doctoral Ac	ademic Studies				
40	D704M			( H00) Mechatro	nics, Doctoral Academic Stu	udies				
16.	DZ01M	Selected Chapters in Mathematics		( I20) Industrial E Doctoral Acader	Engineering / Engineering M nic Studies	lanagement,				
				( M00) Mechanio	cal Engineering, Doctoral Ac	ademic Studies				
				( M40) Technica	l Mechanics, Doctoral Acad	emic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctor	al Academic				
				( S00) Traffic En	gineering, Doctoral Academ	nic Studies				
				( Z00) Environm Studies	ental Engineering, Doctoral	Academic				
				( Z01) Safety at	Work, Doctoral Academic S	tudies				
17.	AID05	Theory of Mobile Processes		(F20) Engineeri	ng Animation, Doctoral Aca	demic Studies				
18.	AID06	Graph theory		(F20) Engineeri	ng Animation, Doctoral Aca	demic Studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.		S., Pantović J., Žunić J.: Partitioning For and Metaheuristics (editor: T. F. Go		teger Grids with	Applications, chapter in: App	proximation				
2.	Ghilezan Neural N	S., Pantović J., Žunić J., Separating petworks, 2007, Vol. 18, No. 5, 1356-1	oints by parallel hyper 363.	planes - characte	ization problem, IEEE Trans	sactions on				
3.		ola Dezani-Ciancaglini, Silvia Ghilezai Sci, 2008, 402(2-3): 156-171	n, Jovanka Pantovic, D	Daniele Varacca:	Security types for dynamic v	veb data. Theor.				
4.	Pantović 2000, 36	J., Vojvodić D., On the cardinality of r 9-374.	nonfinitely based functi	onally complete a	algebras, Algebra Universali	s, Vol. 43, No. 4,				
5.		J., Tošić R., Vojvodić G., The cardina No.2, 1997, 136-140.	lity of functionally com	plete algebras on	a three element set, Algeb	ra Universalis,				
6.		J., Machida H., Rosenberg I.: Regula lo 1-3, pp. 149-162, ISSN 1542-3980	ar sets of operations, J	ournal of Multiple	Valued Logic and Soft Com	nputing, 2012,				
7.		H., Pantović J.: Three classes of max pp. 201-210, ISSN 1542-3980	kimal hyperclones, Jou	ırnal of Multiple V	alued Logic and Soft Comp	uting, 2012, Vol.				
8.		J., Machida H.: Maximal hyperclones . 1-13, ISSN 1542-3980	on E2 as hypercores	, Journal of Mul	tiple Valued Logic and Soft	Computing,				
9.		J., Tošić R., Vojvodić G., Relative cor 2-3), 2001, 337-342.	npleteness with respe	ct to two unary fu	nctions, Discrete Applied Ma	athematics,				
10.		ola Dezani-Ciancaglini, Silvia Ghileza thy Global Computing, Lecture Notes				dings of				
Sur	nmary data	for teacher's scientific or art and profe	essional activity:							
Quot	ation total:		30							
Total	of SCI(SS	CI) list papers :	13							
Curre	Current projects : Domestic : 2 International : 3									



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name	Name and last name:			Pap I. Ištvan					
Acad	emic title:				Assistant Professor				
		itution v	vhere the te	eacher works full time and	-				
	ng date:				0 1 5		10 10 1		
	ntific or art f		Year	Institution	Computer En	gineering ar	nd Computer Communication Field		
Acau	eniic canee	51 -		mstitution			Computer Engineering and Computer		
Acad	emic title el	ection:	2010				Communication		
PhD	thesis		2009	Faculty of Technical Sci	ences - Novi S	ad	Computer Engineering and Computer Communication		
	thesis		2008				Computer Engineering		
Ť	ster thesis		2001	Faculty of Technical Sci			Computer Science		
	elor's thesis		1998	Faculty of Technical Sci			Computer Science		
LIST O	f courses b	eing ne	id by the te	acher in the accredited stu	udy programme	es I			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	RT43	Engine	ering of Co	omnuter Based Systems		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies		
'-	RT43 Engineering of Computer Based Systems					tware Engineering and Information Technologies, luate Academic Studies			
2.	RT52A	RT52A Dedicated Computer Structure Design 1				( E20) Computing and Control Engineering, Undergraduate Academic Studies			
3.	RT52B	Dedicated Computer Structure Design for S Processing			Signal	Engineerin	10) Power, Electronic and Telecommunication ngineering, Undergraduate Academic Studies		
4.	SE1006 Object Oriented Programming 2				Undergrad	tware Engineering and Information Technologies, luate Academic Studies			
		2 Tools on once the gramming 2				Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies		
5.	SERT03	Embedded system design 1				Ùndergrad	tware Engineering and Information Technologies, uate Academic Studies		
						Academic			
6.	RT59	Real-Time System Design				( MR0) Measurement and Control Engineering, Maste Academic Studies     ( SE0) Software Engineering and Information Technology     Master Academic Studies			
						Engineerin	er, Electronic and Telecommunication g, Master Academic Studies		
7.	RT511			puter engineering and cor	mputer	( E20) Con Academic	nputing and Control Engineering, Master Studies		
		commi	unications			( SE0) Software Engineering and Information Technologies, Master Academic Studies			
8.	DRT10	Selecte system		s of embedded computer t	based	( E20) Con Academic	nputing and Control Engineering, Doctoral Studies		
Rep			` `	num 5, not more than 10)					
1.	Consume	er Electr		Vegas: IEEE Consumer E			ment platform, 27. International Conference on 2, ISBN 978-1-4244-4701-5, UDK:		
2.	Mrazovao in home e		′ '	o I., Teslić N.: Smart audi	o/video playba	ck control ba	ased on presence detection and user localization		
3.	Appliance	es, 1. lE	EE Internat	tional Conference on Cons	sumer Electron	ics - Berlin (	Safety and Energetic Efficiency of Home Electric (ICCE-Berlin), Berlin: IEEE Consumer Electronic abs_all.jsp?arnumber=6031795		
4.	Internatio	nal Con	ference on				nmunication Platform Integrated With TV, 27. Electronics Society, , pp. 1-2, ISBN 978-1-4244-		
5.				lands-free Voice Commur 98-3063, UDK: doi: 10.110	nication with TV, IEEE Transactions on Consumer Electronics, 2011, Vol. 57, 09/TCE.2011.5955198				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



L/C	resentative renerences (minimum 5, not more th	all 10)					
6.	Pap I., Šarić Z., Jovičić S., Teslić N.: Adaptive THE ACOUSTICAL SOCIETY OF AMERICA, 2 http://dx.doi.org/10.1121/1.2749077				JOURNAL OF		
7.	Pap I., Šarić Z., Pal S., Velikić I.: Hands-free V Conference on Consumer Electronics - Berlin ( 22-25, ISBN 978-1-4577-0233-4, UDK: 10.110	ICCE-Berlin), Berlin: I	EEE Ċonsumer E				
8.	Kaštelan I., Katona M., Pap I., Davidović M., Rešetar I.: A Full-Duplex Hands-Free Videophone Add-on Device for Digital Television Sets, 1. IEEE International Conference on Consumer Electronics - Berlin (ICCE-Berlin), Berlin: IEEE Consumer Electronics Society, 6-8 Oktobar, 2011, pp. 382-385, ISBN 978-1-4577-0232-7, UDK: http://dx.doi.org/10.1109/ICCE-Berlin.2011.6031817						
9.	Kaštelan I., Katona M., Pap I., Davidović M., Rešetar I.: An Integrated Audio and Video Communication System for Digital Television Sets, 2. IEEE Eastern European Conference on the Engineering of Computer Based Systems, Bratislava: IEEE Computer Society, 5-6 Septembar, 2011, pp. 78-84, ISBN 978-0-7695-4418-2, UDK: http://dx.doi.org/10.1109/ECBS-EERC.2011.20						
10.	Bjelica M., Pap I., Teslić N., Coulon J.: Set-top box-based home controller, 14. IEEE International Symposium on Consumer Electronics (ISCE2010), Braunschweig: IEEE Consumer Electronics Society, 7-10 Jun, 2010, pp. 1-6, ISBN 978-1-4244-6672-6/10, UDK: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5523704						
Sur	mmary data for teacher's scientific or art and profe	essional activity:					
Quot	ation total :	0					
Total	of SCI(SSCI) list papers :	2					
Curre	ent projects :	Domestic ·	n	International ·	0		

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Pavlović J. Slobodan					
Academic title:				Assistant Professor						
Name of the institution where the teacher works full time and			Faculty of Philosophy - Novi Sad							
starti	ng date:					01.10.1993				
Scie	ntific or art f	ield:				Philology				
Acad	lemic carie	er	Year	Institution				Field	1	
Acad	lemic title e	lection:	2011					Philo	ology	
PhD	thesis		2005	Faculty of Philoso	phy - I	Novi Sad		Philo	ology	
Magi	ster thesis		1997	Faculty of Philoso	phy - I	Novi Sad		Serb	pian	
Bach	elor's thesi	S	1993	Faculty of Philoso	phy - I	Novi Sad		Serb	pian	
List	of courses b	eing hel	d by the te	acher in the accred	ited stu	udy programme	s			
	ID	Course	e name				Study programme name, study type			
							( H00) Mech	natro	nics, Undergraduate Acader	nic Studies
		A = = =	: - \^/-:++	and Chaltan Cama		(E10) Power, Electronic and Telecommunication				
1.	E1270		mic vyritten n Languag	and Spoken Comr e	nunica	Engineering, Undergraduate Academic Studies				
							(Z20) Enviro Studies	onme	ental Engineering, Undergrad	duate Academic
Rep	oresentative	reffere	nces (minin	num 5, not more tha	an 10)					
1.	S. Pavlov 234.	vić, "Žan	rovi starosı	pskog poslovnopra	ıvnog s	tila", Naučni sa	stanak slavis	sta u	Vukove dane, 32/1, Beogra	d 2004, 223
2.	S. Pavlov 2006, 18		emski pods	sticaj za konektivnu	unifika	ıciju asertivnos	ti i voluntativr	nosti	u starosrpskom jeziku", Zora	a, 44, Maribor
3.	3. S. Pavlović, "Kondicionalna klauza u starosrpskoj poslovnopravnoj pismenosti", Južnoslovenski filolog, LXII, Beograd 2006, 113 138.									
Sur	mmary data	for teac	her's scien	tific or art and profe	essiona	l activity:				
Quot	ation total:				0					
Total	of SCI(SS	CI) list p	apers :		3					
Current projects : Domestic : 0 International : 0					0					

## FACULTY OF TECH

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Pejić V. Dragan			
Academic title:			Assistant Professor					
Name of the institution where the teacher works full time and			Faculty of Technical Sciences - Novi Sad					
starting date:					01.09.1995			
Scie	ntific or art f	ield:			Electrical Mea	Electrical Measurements		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	ection:	2011				Electrical Measurements	
PhD	thesis		2010	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
Magi	ster thesis		1997	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
Bach	elor's thesi	3	1993	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E130	Electri	cal Measure	ements		Àcadémic	fic and Transport Engineering, Undergraduate Studies tal Traffic and Telecommunications,	
							uate Academic Studies	
2.	E130A	Electri	cal Measur	ements		(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	E140	Measu	ıring in Elec	tronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	E142	Measu	ıring Instrur	nents		( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication		
5.	EIEKI	Electronic Components in Instrumentation				Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication		
6.	EIEMER	Electronic measurements				Engineerin	g, Undergraduate Academic Studies	
7.	EIPMS1	Desigr	n and devel irement sys	opment of industrial devic tems 1	es and	( MR0) Measurement and Control Engineering,     Undergraduate Academic Studies     (E10) Power, Electronic and Telecommunication		
						(MR0) Me	g, Undergraduate Academic Studies asurement and Control Engineering,	
8.	EIPMS2		n and devel irement sys	opment of industrial devic tems 2	es and	_	uate Academic Studies er, Electronic and Telecommunication	
						Engineering, Undergraduate Academic Studies		
9.		Labora	atory praction	cum		l 🔪	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	MR0UL R			oratory practice		, ,	asurement and Control Engineering, uate Academic Studies	
11.	BMIM5B	Desigr system		opment of medical device	s and	, ,	medical Engineering, Master Academic Studies	
12.	EIMIO	Measu	ırement sys	tems in industrial environi	ment	Academic	asurement and Control Engineering, Master Studies er, Electronic and Telecommunication	
Enginee						g, Master Academic Studies		
Rep			•	num 5, not more than 10)				
1.	Measure	ment, 20	000, Vol. 49	, No 3, pp. 617-620			r, IEEE Transaction on Instrumentation and	
2.	on Instru	mentatio	on and Mea	surement, 1999, Vol. 48, I	No 2, pp. 467-4	70	tochastic True RMS Instrument, IEEE Transaction	
3.				ing System for Supervisio , pp. 9-12, UDK: 621.3-52		elding Mach	nine PRSM-4 No. 083, Journal of Automatic	
4.	4. Pejić D.: Stohastičko merenje električne snage i energije, Novi Sad, FTN, 2010							

## THE STUDIOR ST

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative reflerences (minimum 5, not more than 10)								
5.	D. Pejić, P. Sovilj, M. Urekar, V. Vujičić, Lj. Župunski, Uticaj zajedničkog napona na merenje biomedicinskog p300 potencijala, Zbornik radova 56. konferencije za ETRAN, Zlatibor, 11. – 14.6. 2012, pp. ML1.9-1-4, ISBN 978-86-80509-67-9							
6.	Pejić D., Urekar M., Vujičić V., Avramov-Zamurović S.: Comparator offset error supression in stochastic converters used in a Watt-Hour Meter, 1. Conference on Precision Electromagnetic Measurements - CPEM 2010, Daejeon, 13-18 Jun, 2010, pp. 235-236, ISBN 978-1-4244-6794-5							
7.	Pejić D., Urekar M., Crnojakić M., Župunski I., metrologa, Zlatibor: Kongres metrologa, 24-26		KO BROJILO ELE	KTRIČNE ENERGIJE, 4. Ko	ongres			
8.	Antić B., Pejić D.: Merni sistem za nadzor maš	šine za zavarivanje šin	a PRSM-4 br.083	, 50. ETRAN, Beograd, 6-9	Jun, 2006			
9.	Pejić D.: Višekanalno merenje faktora izobliče	nja, Novi Sad, 1997						
10.	Mitrović Z., Pejić D., Župunski I., Urekar M., Milovančev S., Vujičić V.: Metoda merenja aktivne snage u složenoperiodičnom režimu, 2011							
Sui	mmary data for teacher's scientific or art and profe	essional activity:						
Quo	Quotation total :							
Tota	Total of SCI(SSCI) list papers :							
Current projects : Domestic : International :								



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name:					Pekarić-Nađ M. Neda			
Academic title:			Full Professor					
I			Faculty of Technical Sciences - Novi Sad					
starting date:					01.07.1978			
	ntific or art f			1 000	Theoretical Electrotechnics			
	lemic carie		Year	Institution	N :0		Field	
	lemic title e	ection:	2001	Faculty of Technical Sci			Theoretical Electrotechnics	
	thesis		1984	School of Electrical Engi			Electrical and Computer Engineering	
⊢ <u> </u>	ster thesis nelor's thesis		1981 1978	School of Electrical Engineering  Faculty of Technical Science			Electrical and Computer Engineering  Electrical and Computer Engineering	
				acher in the accredited stu			Liectrical and Computer Engineering	
LIST	T COUISCS D	cing no	id by the ter	acrici ili tric acci cuitcu sti	ady programme	,3 		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E216	Funda	mentals of	Electrical Engineering		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
2.	1087	Electri	cal Enginee	ering in Industrial Enginee	ring	( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
3.	E105	Funda	mentals of	Electrical Engineering 1			ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
	2100						asurement and Control Engineering, uate Academic Studies	
4.	E110	110 Fundamentals of Electrical Engineering 2				, ,	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
							asurement and Control Engineering, uate Academic Studies	
5.	II1007 Fundamental electrical engineering				(110) Industrial Engineering, Undergraduate Academic Studies			
J.	II1007	Tunua	mental elec	and engineering		( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
6.	II1010	Contro	of technic	al systems		(110) Industrial Engineering, Undergraduate Academic Studies		
7.	IM1022	Funda	mentals of	technical systems control		( I20) Engii Studies	neering Management, Undergraduate Academic	
,.	11011022	- undu	meritals or	commod systems control			chanization and Construction Engineering, uate Academic Studies	
8.	URZP12	Introdu	uction to ele	ectrical engineering			aster Risk Management and Fire Safety, uate Academic Studies	
9.	DE208S	Select	ed Chapters	s on Electromagnetic Con	npatibility	Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	DE408S	Select	ed chapters	s inl electromagnetics		, ,	ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	URZP55	Fire ar	nd Explosio	n Protection due to Electri	icity	Academic		
12.	DE208	Select	ed Chapter	s on Electromagnetic Con	npatibility	( E10) Pow Engineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
13.	DE408	Select	ed Chapter	s in Electromagnetics			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Neda Pel	karić-Na	ıdj, Vera Ba	ijović, "Izbor rešenih probl	ema iz Osnova	elektrotehn	nike", Gradjevinska knjiga, Beograd, 2007	
2.	Neda Pel	karić-Na	ıdj, Dejana	Herceg, "Osnovi elektrote	hnike za stude	nte Računai	rskog odseka" edicja FTN, Novi Sad, 2005	
3.	Nikolajević S. Pekarić Nadi N. Dimitrijević P. "Ontimization of cable terminations". IEEE Trans. PWPD Vol.12. No. 2. 1007 p. p.							
4.				N, Dimitrijević R, "A new c me 13, No. 3, July 1998, p		truction of c	able terminations for medium voltages", IEEE	

## STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)								
5.	Šećerov Sokolović R., Sokolović S., Mihajlović Đ., Gelei T., Pekarić Nađ N., Šević S.: Effect of pulsed electromagnetic field on crude oil rheology, Industrial and Engineering Chemistry Research, 1998, Vol. 37, No 12, pp 4828-4834, ISSN 0888-5885								
6.	Buranj N., Milutinov M., Pekarić Nađ N.: Uređaj za izlaganje malih tečnih uzoraka magnetskom polju, 2011								
7.	Juhas A., Pekarić Nađ N., Herceg D.: Estimation of Human Exposure to Combined RF EM Field of Multiple Antennas, 5. International PhD Seminar on Computational Electromegnetics and Optimization inElectrical Engineering CEMOEE, Sofija: Proceedings of International PhD Seminar on Computational electromagnetics and optimization in electrical engineering – CEMOEE 2010, Sofia, Bulgaria, 10-13 September, 2010, 10-13 Septembar, 2010, pp. 27-31, ISBN 978-954-438-856-0								
8.	Herceg D., Pekarić Nađ N., Juhas A.: Shield shape influence on a coreless probe inductance, 5. International PhD Seminar on Computational Electromegnetics and Optimization inElectrical Engineering CEMOEE, Sofija: Proceedings of International PhD Seminar on Computational electromagnetics and optimization in electrical engineering – CEMOEE 2010, Sofia, Bulgaria, 10-13 September, 2010, 10-13 Septembar, 2010, pp. 18-21, ISBN 978-954-438-856								
9.	Milutinov M., Juhas A., Pekarić Nađ N.: Power Symposium on Electrical Apparatus and Techr								
10.	Dimitrijević R., Tasić D., Raičević N., Aleksić S Embedded Electrodes, Facta universitatis - ser								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	16							
Tota	l of SCI(SSCI) list papers :	3							
Current projects : Domestic : 2 International : 1					1				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:			Petrovački Lj. Nebojša					
		Assistant Pro	fessor					
	e of the inst ng date:	titution v	where the te	eacher works full time and	-			
Scientific or art field:			Automatic Co	ontrol and Sy	ystem Engineering			
Acad	emic caries	er	Year	Institution			Field	
Acad	emic title el	lection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Automatic Control and System Engineering	
PhD	thesis		2008	Faculty of Technical Sci			Automatic Control and System Engineering	
Magi	ster thesis		2005	University of California, Angeles	Los Angeles - I	Los	Automatic Control and System Engineering	
Bach	elor's thesis	s	2000	Faculty of Technical Sci	ences - Novi S	ad	Automatic Control and System Engineering	
List c	f courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
						( E20) Cor Academic	nputing and Control Engineering, Undergraduate Studies	
						( H00) Med	chatronics, Undergraduate Academic Studies	
1.	E226	Autom	atic Contro	Systems			easurement and Control Engineering, luate Academic Studies	
							tware Engineering and Information Technologies - Indergraduate Academic Studies	
						( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
2.	E238A	Control Systems Technology				( E20) Computing and Control Engineering, Undergra Academic Studies		
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
3.	M3408	Automatic Control Systems				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
4.	BMI125	Biolog	ical Control	Systems		( BM0) Biomedical Engineering, Undergraduate Academic Studies		
5.	EMSAU 1	Autom	atic Contro	Systems in Electronics			er, Electronic and Telecommunication ng, Undergraduate Academic Studies	
6.	GG226	Autom	atic control	systems in geomatics		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
7.	GG99	Geosp	atial techno	ologies - basics			aster Risk Management and Fire Safety, luate Academic Studies	
8.	M3409	Autom	atic control	systems		( M30) End Academic	ergy and Process Engineering, Undergraduate Studies	
	A11500	Nantin	C t l	Customs		( E20) Cor Academic	nputing and Control Engineering, Master Studies	
9.	AU509	NONIIN	ear Control	Systems		( MR0) Me Academic	easurement and Control Engineering, Master Studies	
						( E20) Cor Academic	nputing and Control Engineering, Master Studies	
10.	GIAU01	Geose	nsor netwo	rks		( MR0) Me Academic	easurement and Control Engineering, Master Studies	
							er, Electronic and Telecommunication ng, Master Academic Studies	
11.	M3417	Applie	d industrial	automatization		( M30) Ene Studies	ergy and Process Engineering, Master Academic	
12.	DGI018	Select	ed Chapter	s of Automatic Control Sy	stems	( GI0) Geo	desy and Geomatics, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	2.Zoran D. Jeličić, Nebojša Petrovački: Optimality Conditions and a Solution Scheme For Fractional Optimal Control Problems, accepted for publication on July 29th, 2008 in Journal of Structural And Multidisciplinary Optimization, Springer, Berlin-Heidelberg							
2.	1. Nebojša Petrovački: Identifikacija, simulacija i upravljanje klasom EDFA pojačavača, Doktorska disertacija, Fakultet tehničkih							

Datum: 18.12.2012 Strana 345

nauka u Novom Sadu, Novi Sad, decembar 2008. godine.



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative reflerences (minimum 5, not more than 10)									
3.	3. Zoran D. Jeličić, Nebojša Petrovački: On The Fractional Order Model of EDFA With ASE, in The Proceedings of IEEE Conference on Numerical Simulation of Optical Devices, University of Nottingham, Great Britain, September 2008.									
4.	4.Zoran D. Jeličić, Nebojša Petrovački: Fractional Derivative Model of Erbium-Doped Fiber Amplifiers With Asynchronous Spontaneous Emission, in Book of Abstracts of 2007 SIAM Conference on Control and Its Applications, June 29th - July 1st, 2007, San Francisco, California									
5.	<ul> <li>5.Nebojša Petrovački, Zoran D. Jeličić: Specific Optimal Control of Erbium-Doped Fiber Amplifiers, in The Proceedings of IFAC</li> <li>Workshop: Technology Transfer In Developing Countries: Automation in Infrastructure Creation, May 17-18, 2007 Izmir-Cesme, Turkey</li> </ul>									
6.	6. Nebojša Petrovački, Zoran D. Jeličić: Modeling, Simulation, And Control of Erbium-Doped Fiber Amplifiers, in The Proceedings of 7th Portuguese Conference on Automatic Control, Lisbon, Portugal, September 11-13th 2006									
7.	7. Nebojša Petrovački, Zoran D. Jeličić: Optimal Transient Response of Erbium-Doped Fiber Amplifiers, in The Proceedings of The 6th IEEE International Conference on Numerical Simulation of Optoelectronic Devices, Nanyang Technological University, Singapore, September 11-14th 2006									
8.	8.Nebojša Petrovački: Stationary Simulation of Proceedings of The 10th World Multi-Conferen Orlando, Florida (co-chair of the session)		0	, ,	,					
9.	9.Nebojša Petrovački: Erbium-Doped Fiber Am University of California, San Diego, April 14th,		Department of Ele	ectrical and Computer Engin	eering of					
10.	11.Nebojša Petrovački: Gain Regulation In Erb The International Conference on Computer As		,	0	OCON 2005:					
Sur	mmary data for teacher's scientific or art and profe	essional activity:								
Quot	ation total :	0								
Tota	Total of SCI(SSCI) list papers : 1									
Current projects: Domestic: 0 International: 3					3					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Petrović S. Vladimir			
Academic title:			Assistant Pro					
		itution v	vhere the te	eacher works full time and	-			
starting date:  Scientific or art field:			Telecommun	ications and	Signal Processing			
	emic carie		Year	Institution	releccommun	ications and	Field	
	emic title el		2009	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
PhD	thesis		2001	University of Mancheste			Telecommunications and Signal Processing	
Bach	elor's thesis	3	-	•	<u> </u>		Telecommunications and Signal Processing	
Magi	ster thesis		-				Telecommunications and Signal Processing	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EK300	Digital	Modulation	os.			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EK412	Shape	Recognition	n		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
3.	BMI121	Image Imagir		and Computer Vision in I	Medical	( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
4.	EK463	Patteri	n Recogniti	on			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EK464	Comm	unication S	ystems Design		Ùndergrad	tal Traffic and Telecommunications, uate Academic Studies	
		Communication Systems Design				Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EK520	Medical Image Processing				(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
7.	EK521	EK521 Information and Communication Theory				( S01) Postal Traffic and Telecommunications, Master Academic Studies (E10) Power, Electronic and Telecommunication		
	114.400					Engineering, Master Academic Studies		
8.	H1420	Funda	mentals in	Mechanical Vision		( H00) Mechatronics, Master Academic Studies ( E10) Power, Electronic and Telecommunication		
9.	DE311		·	s in Pattern Recognition			g, Doctoral Academic Studies	
Rep			•	num 5, not more than 10)				
1.	Transacti	ons on	Pattern Ana	alysis and Machine Intellig	ence, 2010, Vo	ol. 32, No 11	Correspondences across Groups of Images, IEEE , pp. 1994-2005, ISSN 0162-8828	
2.							2007, Vol. 8, No 2, pp. 168-176, ISSN 1566-2535	
3.			jective tests 566-2535	s for image fusion evaluati	ion and objectiv	e metric va	lidation, INFORM FUSION, 2007, Vol. 8, No 2, pp.	
4.	2004, Vo	l. 13, No	2, pp. 228	-237, ISSN 1057-7149			mance, IEEE Transactions on Image Processing,	
5.	Petrović \ 183, ISSI	-		nsor noise effects on signa	al-level image f	usion perfor	mance, INFORM FUSION, 2003, Vol. 4, pp. 167-	
6.	Petrović \ 0091-328		eas C.: Obj	ective Evaluation of Signa	al-level Image F	usion Perfo	rmance, OPT ENG, 2005, Vol. 44, No 8, ISSN	
7.	Images",	Internat	tional Symp		ging: From Nar		tation and Modelling of Structure in Groups of ISBI2007, pp.1-4; Print ISBN: 1-4244-0672-2;	
8.	and Analy	ysis, MI		o. 1-5; ISBN 1 901725 33			of Medical Images", Medical Image Understanding ar, Frédéric Labrosse; University of Wales,	
9.							on", Proceedings of 10th International Conference 09/ICIF.2007.4408120; Quebec, 9-12 July 2007	
10.	British Ma	achine \	ision Confe	erenceBMVC2007, organi	sed by the Briti		mable Structure in Groups of Images", 18th Vision Association;; Conference Chairs: Abhir	
Sur	Bhalerao and Nasir Rajpoot; Warwick, GB September 10-13, 2007  Summary data for teacher's scientific or art and professional activity:							

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation



Power, Electronic and Telecommunication Engineering UNDERGRADUATE ACADEMIC STUDIES

Quotation total :	1359					
Total of SCI(SSCI) list papers :	7					
Current projects :	Domestic :	2	International:	1		

Strana 348 Datum: 18.12.2012



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Pjeva					Pjevalica U. N	Pjevalica U. Nebojša		
Academic title:					Assistant Professor			
		titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starting date:			01.08.1997					
Scientific or art field:					Electrical Measurements			
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	lection:	2008	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
PhD	thesis		2007	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
Magi	ster thesis		2001	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
Bach	elor's thesis	S	1995	Faculty of Technical Sci	ences - Novi Sa	ad	Electrical Measurements	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E130	Electri	cal Measur	ements		Àcadémic		
						Ùndergrad	tal Traffic and Telecommunications, luate Academic Studies	
						Àcadémic		
2.	E227A	Logic I	Design of C	omputer Systems 1		Àcadémic		
						Ùndergrad	easurement and Control Engineering, luate Academic Studies	
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
						( E20) Computing and Control Engineering, Undergraduate Academic Studies		
3.	E244	Selected Chapters in Physical Architecture Design			Design	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
4.	BMI115	Biome	dical Engin	eering in Cognitive Neuro	science	( BM0) Biomedical Engineering, Undergraduate Academic Studies		
5.	El410	Biophy	/sics			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
6.	EIMET	Metrol	ogy				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
7.	BMIM5A			ent instrumentation in bior		( BM0) Biomedical Engineering, Master Academic Studies		
8.	BMIM5B	systen	าร	opment of medical device		( BM0) Biomedical Engineering, Master Academic Studies		
9.	BMIM5D			nce Devices in Biomedicii		( BM0) Biomedical Engineering, Master Academic Studies		
10.	BMIM5E	Distrib biome		rement and acquisition sy	ystems in	( BM0) Bio	medical Engineering, Master Academic Studies	
Rep	oresentative			num 5, not more than 10)				
1.							ues in Multimedia/B-ISDN Based /5-428, Nis, Yugoslavia 1997.	
2.	A.Kozare	v, M. Ni	kolic, D. Mi		itegrated Appro	ach to Publ	lic Telecommunication Network in Multimedia/B-	
3.				uency Deviation Measurer easurement Technology (			Delta - Sigma Modulated Bridge", IMTC2001 Judapest, Hungary 2001.	
4.				nastic Signal Processing U 2002, Vol 14, pp653-658,			ation", Proceedings of the Fifth Biannual World	
5.		N. Pjeva	alica, A Nev				ng in Frequency Domain, JUKO CIRED 2006,	
6.	Djuro G.	Zrilic, N	ebojsa U. P	jevalica, "Frequency Devi tion and measurement, vo			on Two-Arm D-S Modulated Bridge" IEEE 293-299.	
7.	N. Pjeval	ica, V. F	Pjevalica, "N		oj distributivno	j mreži prim	enom digitalnih mernih pretvarača", Simpozijum o	
	, , , , , , , , , , , , , , , , , , ,							

# TAS STUDIO REAL

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication



Rep	Representative refferences (minimum 5, not more than 10)									
8.	V. Vujičić, N. Pjevalica, "Stohastička realizacija digitalnih filtara", D.O.G.S. 2000 zbornik radova, pp.60-63, Novi Sad, Yugoslavia 2000									
9.	9. N. Pjevalica, "Digitalno merilo efektivne vrednosti", Kongres metrologa Jugoslavije 2000, (CD-ROM zbornik radova), Novi Sad, Yugoslavia 2000.									
10.	J. Tomić, N. Pjevalica, Integrisano merilo har	monika, Kongres metrol	oga, Beograd, 20	05 godina.						
Sun	nmary data for teacher's scientific or art and pro	fessional activity:								
Quota	ation total :									
Total	Total of SCI(SSCI) list papers :									
Curre	ent projects :	Domestic :		International :						



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last n	ame:			Popov B. Srđan			
Acad	lemic title:				Assistant Pro	fessor		
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				05.09.2001			
Scie	ntific or art f	ield:			Applied Comp	Applied Computer Science and Informatics		
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	lection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering	
Magi	ster thesis		2007	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering	
Bach	elor's thesis	S	1999	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E111	Progra	ımming Lar	iguages and Data Structur	res	Engineerin ( MR0) Me	ver, Electronic and Telecommunication g, Undergraduate Academic Studies assurement and Control Engineering,	
							luate Academic Studies  nputing and Control Engineering, Undergraduate Studies	
2.	E214	Progra	ımming Lar	guages and Data Structu	res	( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies	
3.	URZP11	Funda	mentals of	Information Technologies			aster Risk Management and Fire Safety, luate Academic Studies	
4.	URZP23	Applie	d Informatio	on Technologies		( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies		
5.	URZP44	manag	gement	oinformation technology ir			aster Risk Management and Fire Safety, luate Academic Studies	
6.	IMDS45		ation of info gement	rmation and satellite tech	nology in risk	Studies	neering Management, Specialised Academic	
7.	E2534	Data C	Compressio	n		Academic		
						Master Aca	tware Engineering and Information Technologies, ademic Studies	
						Academic		
8.	DRNI01	Select	ed Topics ii	n Computer Programming		` ′	chatronics, Doctoral Academic Studies	
						( OM1) Mathematics in Engineering, Doctoral Academ Studies		
9.	IMDR45		ation of Info lanagemen	ormation and Satellite Tech t	hnologies in		strial Engineering / Engineering Management, cademic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	bound po	lycyclic	aromatic h	J., Turk Sekulić M., Vojino ydrocarbons in the vicinity 2J, Hemijska industrija, 20	of the industria	al zone of th	.: Identification of emission sources of particle- e city of Novi Sad DOI:	
2.	Ćosić Đ.,	Popov	S., Sakulsk		ormation Techr		isaster Risk Assessment, Acta Geotechnica	
3.	Malbaški educatior	D., Kup n manag	usinac A., l gement, 201	Popov S.: The Impact of (I1, Vol. 6, No 4, pp. 1073-	Coding Style or 1082, ISSN 18	the Reada 40-1503	bility of C Programs, TTEM. Tehnics tehnologies	
4.							Disaster Risk Reduction, 1. International ce, 5 Maj, 2012, pp. 15-16, ISBN 978-86-7031-	
5.				v S., Pavlović A., Laban M y, Bar: Fakultet za pomors			ent and fire safety, 1. International conference 2, pp. 75-81	
6.							Luhović A.: The aspect of bringing data in anagement", UDK: 37.01:004 (082)	
7.		ja, Tema	atski zborni				ava poplave i suše u cilju poboljšanja planiranja 2, No 12, pp. 136-146, ISSN 978-86-7520-107-6,	

# TO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



# Representative refferences (minimum 5, not more than 10) 8. Popović Lj., Popov S., Ćosić Đ., Sakulski D.: Impact of Visualization on Data Availability, UDK: CIP je dostupan u Univerzitetskoj biblioteci Rijeke pod brojem 121219001

9. Alargić I., Badnjarević I., Vrtunski M., Popov S.: Setting the platform for testing the quality of DTM in the format of DTM-ASCII , 8. IEEE International Symposium on Intelligent Systems and Informatics (SISY), Subotica, , pp. 253-256, ISBN 978-1-4244-7395-3

	IEEE International Symposium on Intelligent Systems and Informatics (SISY), Subotica, , pp. 253-256, ISBN 978-1-4244-7395-3										
10.	Popov S., Pavlović A., Ćosić Đ., Hlebjan M.: Interfacing Data Structures of Legacy Systems, 8. IEEE International Symposium on Intelligent Systems and Informatics (SISY), Subotica: 2010 IEEE , , pp. 409-411, ISBN 978-1-4244-7395-3										
Su	Summary data for teacher's scientific or art and professional activity:										
Quo	tation total :	0									
Tota	l of SCI(SSCI) list papers :	3									
Curi	ent projects:	Domestic :	2	International :	0						
		-									



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

amia titla:				Popović V. Miroslav			
emic title:				Full Professo	r		
e of the inst	itution v	here the te	eacher works full time and	Faculty of Te	chnical Scie	ences - Novi Sad	
ng date:				21.03.1985			
ntific or art f	ield:			Computer En	mputer Engineering and Computer Communication		
emic cariee	er	Year	Institution			Field	
emic title el	ection:	2002	Faculty of Technical Science	ences - Novi S	ad	Computer Engineering and Computer Communication	
thesis		1990	Faculty of Technical Science	ences - Novi S	ad	Electrical and Computer Engineering	
ster thesis		1988	Faculty of Technical Science	ences - Novi S	ad	Electrical and Computer Engineering	
elor's thesis	3	1984	Faculty of Technical Science	ences - Novi S	ad	Electrical and Computer Engineering	
f courses b	eing hel	d by the te	acher in the accredited stu	idy programme	s		
ID	Course	e name			Study pro	ogramme name, study type	
					( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
E23A2	Real T	ime Systen	n Programming 1			tware Engineering and Information Technologies - Indergraduate Academic Studies	
						er, Electronic and Telecommunication ng, Undergraduate Academic Studies	
					( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
E23M	Real T	ime Systen	n Programming 2		( ES0) Power Software Engineering, Undergraduate Academic Studies		
						easurement and Control Engineering, luate Academic Studies	
SE0032	Daralle	al Programm	mina			tware Engineering and Information Technologies, luate Academic Studies	
3L0032	raialle	arriogiailii	ming			tware Engineering and Information Technologies - Indergraduate Academic Studies	
SE1006	Ohiect	Oriented F	Programming 2			tware Engineering and Information Technologies, luate Academic Studies	
3L1000	Object	Offerfied i	Togramming 2		( SEL) Software Engineering and Information Technologi Loznica, Undergraduate Academic Studies		
SERT01	Systen	n Programr	ning 1		( SE0) Software Engineering and Information Technologic Undergraduate Academic Studies		
DT57	Inter C	omputer C	ommunications and Comp	uter	( E20) Con Academic	nputing and Control Engineering, Master Studies	
KISI	Netwo	rks 2				tware Engineering and Information Technologies, ademic Studies	
RT511			puter engineering and con	nputer	( E20) Con Academic	nputing and Control Engineering, Master Studies	
KISTI	commi	unications	-			tware Engineering and Information Technologies, ademic Studies	
DAU002	Selecte	ed Chapter	s in Computing		( F00) Gra Studies	phic Engineering and Design, Doctoral Academic	
		·			( H00) Med	chatronics, Doctoral Academic Studies	
DRT01	Selecte	Selected Chapters in Real Time Systems S			( E20) Con Academic	nputing and Control Engineering, Doctoral Studies	
	Select	ad Tonics i	n Computing		( E20) Con Academic	nputing and Control Engineering, Doctoral Studies	
DA0014	Selecti	eu Topics II	i computing		( OM1) Ma Studies	athematics in Engineering, Doctoral Academic	
oresentative	reffere	nces (minin	num 5, not more than 10)				
						n vremenu 1: Programski alati i paralelno	
Vladimir I	Kovačev	rić, Mirosla	v Popović, Sistemska prog	ramska podršl	ka u realnon	n vremenu 2: Operativni sistemi za rad u realnom	
	emic title el emic title el emic title el emic title el el emic title el enic title el emic title el emic title el enic title el emic title el el enic title el enic tit	ng date:  ntific or art field: emic carieer  emic title election: thesis ster thesis elor's thesis of courses being hele ID Course  E23A2 Real T  E23M Real T  SE0032 Paralle  SE1006 Object  SERT01 System  RT57 Inter C Netwo  RT511 Practic common	ng date:  ntific or art field: emic title election:  thesis  1990 ster thesis  elor's thesis  1984  for courses being held by the te  ID  Course name  E23A2  Real Time System  SE0032  Parallel Programm  SE1006  Object Oriented F  SERT01  System Programm  RT57  Inter Computer Conductor System Programm  RT57  Inter Computer Conductor System Programm  RT57  Practicum in communications  DAU002  Selected Chapter  DRT01  Selected Chapter  DRT01  Selected Chapter  DAU014  Selected Topics in programmanje, Univerzitet un Vladimir Kovačević, Miroslam programmanje, Univerzitet un Vladimir Kovačević, Miroslam programiranje, Univerzitet un Vladimira Kovačević, Miroslam programiranje, Univ	ng date: mitic or art field: emic carieer Year Institution  emic title election: 2002 Faculty of Technical Sciethesis 1990 Faculty of Technical Sciethesis 1988 Faculty of Technical Scieter thesis 1984 Faculty of Technical Scieter's thesis 1984 Faculty of Technical Scietor's faculty of Technical Scietor's thesis 1984 Faculty of Technical Scietor's faculty	ng date:    21.03.1985   Computer Entific or art field:   Prior carrier   Year   Institution	Intific or art field:  Inter Computer Communications and Computer Networks 2  Inter Computer Communications Suddens (SED) Soft Master Accordamic (	

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
3.	Miroslav Popović, Communication Protocol En	,	Boca Paton Flo	rida 2006 ISBN 08403081	42				
٥.	· · · · · · · · · · · · · · · · · · ·								
4.	Čapko D., Erdeljan A., Popović M., Švenda G.: An Optimal Relationship-Based Partitioning of Large Datasets, LNCS, Springer Verlag, 2010, str. 555-558, ISBN 978-3-642-15575-8								
5.	Popović M., Bašičević I.: Test case generation for the task tree type of architecture, Information and Software Technology, Elsevier, 2010, Vol. 52, No 6, pp. 697-706, ISSN 0950-5849								
6.	Popović M., Kuprešanin I., Bašičević I.: Generic method for statistical testing of parallel programs based on task trees, Scientific Research and Essays, 2012, Vol. 7, No 11, pp. 1992-2248, ISSN 1992-2248								
7.	Čapko D., Erdeljan A., Švenda G., Popović M.: A Dynamic Repartitioning of Large Data Model in Distribution Management Systems, Electronics and electrical engineering, 2012, Vol. 5, No 121, pp. 1392-1215, ISSN 1392-1215								
8.	Čapko D., Erdeljan A., Popović M., Švenda G.: Journal of Advances in Electrical and Compute				ment Systems,				
9.	Bašičević I., Kukolj D., Popović M.: On the approximations, Applied Intelligence, 2010, Vo			roach to High Altitude Platf	orm				
10.	Bašičević I., Popović M.: Use of SIP Protocol i 2008, Vol. 3, No October, ISSN 1477-4739	n Development of Tele	ecom Services , .	Journal of The Communicat	ions Network,				
Sui	mmary data for teacher's scientific or art and profe	essional activity:							
Quo	tation total :	216							
Tota	l of SCI(SSCI) list papers :	11							
Curr	ent projects :	Domestic :	1	International:	1				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:				Popović S. Dragan			
	lemic title:				Full Professo			
Nam	e of the inst	itution v	vhere the te	eacher works full time and	-			
starti	ng date:							
	ntific or art f			Τ	Electroenerge	etics		
Acad	Academic carieer Year Institution						Field	
Acad	lemic title e	ection:	2004	Faculty of Technical Sci			Electroenergetics	
PhD	thesis		1995	School of Electrical Eng			Electroenergetics	
	ster thesis		1990	School of Electrical Eng			Electroenergetics	
	elor's thesi		1985	Faculty of Technical Sci			Electroenergetics	
List	of courses b	eing he	ld by the te	acher in the accredited str	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EE415A	Distrib	ution Netwo	ork Analysis and Manager	ment		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE420	Exploit	tation of Dis	stribution Systems / Netwo	orks	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
		_Apioii	Canon or Dis	Salisation Systems / Netwo		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	ESI011	Softwa	are security	and safety in power engir	neering	Àcadémic		
4.	ESI014	Integra	ation of pow	ver systems		Academic		
5.	DE104S	Regula	ation and D	istribution Network Manag	gement	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
6.	DE205S	Distrib	ution netwo	orks development pllannin	g		ver, Electronic and Telecommunication g, Specialised Academic Studies	
7.	DE308S	Facility Netwo		and Optimization of Distrib	oution		ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	EE500	Modell	ling in Pow	er Systems			er, Electronic and Telecommunication g, Master Academic Studies	
9.	EE504	Manag DMS	gement Sys	tems in Power Engineerin	g – EMS and		er, Electronic and Telecommunication g, Master Academic Studies	
10.	EE562	Power	System Ex	ploitation			er, Electronic and Telecommunication g, Master Academic Studies	
11.	DE217S	PES A	nalysis 4			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
12.	DE217	PES A	nalysis 4			l 🔪 . ' .	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
13.	DE308	Facility Netwo		and Optimization of Distrib	oution		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Lendak I.	, Erdelja	an A., Popo	vić D.: Algorithm for cata	loguing topolog	ies in the C	ommon Information Model (CIM), Computers	
2.				tive Maintenance Schedu 2007, Vol. 22, No 2, pp. 59		n Networks	Based On Risk Management Approach, IEEE	
3.		, ,	,	Z.: Extension of the Com 22, No 2, pp. 770-777	nmon Information	on Model Wi	ith a Catalog of Topologies, IEEE Transactions on	
4.				Risk management Procedunsactions on Power Syste			in Distribution Networks, IEEE Transactions on b. 221-229	
5.	Popović I 14, No 3,			i-Objective Algorithm for E	Distribution Net	works Resto	oration, IEEE Trans. on Power Delivery, 1999, Vol.	
6.							e Control and Load Shedding to Prevent Voltage mission and Distribution, 1997, No 3, pp. 293-300	
7.		•	D.: Integra 4, pp. 1493	0,	smission and R	Reactive Pov	ver Planning , IEEE Trans. on Power Systems,	
8.				V.: Voltage/Reactive Sen, Transmission and Distr			rstems with Automatic Secondary Voltage Control, 7-183	
-					·	•••		

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10)

- 9. Strezoski V., Popović D., Bekut D., Švenda G.: DMS Basis for Increasing of Green Distributed Generation Penetration in Distribution Networks, Thermal Science, 2012, Vol. 1, No 16, pp. 189-203, ISSN 0354-9836
- 10. Popović D., Glamočić Lj., Nimrihter M.: The Optimal Automation Level of Medium Voltage Distribution Networks, International Journal of Electrical Power

	oddfildi oʻr Elootilodi i oʻroʻi									
Su	Summary data for teacher's scientific or art and professional activity:									
Quo	tation total :	185								
Tota	I of SCI(SSCI) list papers :	15								
Curr	rent projects:	Domestic :	0	International :	0					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	Name and last name:					Popović N. Željko					
	lemic title:					Assistant Pro	_				
Nam	e of the inst	itution v	here the te	acher works full tir	ne and	Faculty of Ted	chnical Scie	nces -	Novi Sad		
	ng date:					01.10.2012					
Scie	ntific or art f	ield:				Electroenergetics					
Acad	lemic carie	er	Year	Institution				Field	i		
Acad	lemic title el	ection:	2012	Faculty of Techni	ical Sci	ences - Novi Sa	ad	Elec	troenergetics		
PhD	thesis		2011	Faculty of Techni	ical Sci	ences - Novi Sa	ad	Elec	troenergetics		
Magi	ster thesis		1999	School of Electric	al Eng	ineering - Beog	ırad	Elec	troenergetics		
Ť	elor's thesis	3	1988	Faculty of Techni					troenergetics		
List o	of courses b	eina hel	d by the tea	acher in the accred							
	ID	Course	e name			, , c	Study pro	gramı	me name, study type		
1.	EE420	Evnloit	ation of Dis	stribution Systems	/ Netwo	orke	( ES0) Pow Academic S		oftware Engineering, Under	graduate	
		Exploit	auon or Dic						ectronic and Telecommunic dergraduate Academic Stu		
2.	DE205S	Distrib	ution netwo	orks development p	llannin	g		(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
3.	DE205	DE205 Planning the Distribution Networks Developm					(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies				
4.	DE306	Load N	/lanagemer	nt in PES					ectronic and Telecommunictoral Academic Studies	cation	
Rep	oresentative	reffere	nces (minim	num 5, not more th	an 10)						
1.				c, "A Risk managen .1, pp. 221-228, Fe			pply Restora	ation i	n Distribution Networks", IE	EEE Trans. on	1
2.				c, "Graph theory ba No. 10 , pp. 1256-			Iti-period dis	stributi	on expansion problems", E	lectric Power	
3.				pansion planning o			using simul	lated a	annealing technique", in Pr	oceedings of the	he
4.				"A Graph Theory E ference on electric					ibution Expansion Plannin	g Problems", ir	n
5.	Ž. Popov	ic, D. S.	Popovic, V	'. Dj. Kerleta, "Risk	Manag	gement Based I	Procedure fo	or Mul	ti-Stage Expansion Plannir		on
6.	Ž. Popov	ic, D. S.	Popovic, V		Novel I	Methodology fo	r Multi-Year	Planr	ning of Large-Scale Distribu		3",
7.	Ž. Popov	ic, D. S.	Popovic "A		nming E	Based Procedu	re for Distrib		Network Planning", in Proc	eedings of the	9
8.	Ž. Popov	ic, D. S.	Popovic, "I		l as a N			eregu	ılated Power Industries", ir	Proceedings	of
9.	Ž. Popov	ic, D. S.	Popovic, "/	•	ition Pi				Planning", in Proceedings	of the 38th	
10.	D. S. Pop	ovic, Ž.	Popovic, "I	Distribution Networ	k Resto	oration Supply I			Risk Management", in Proce	eedings of the	!
Sur	17th conference on electricity distribution CIRED, May 2003.  Summary data for teacher's scientific or art and professional activity:										
	Quotation total : 26										
	of SCI(SS	CI) list p	apers :		3						
Current projects : Domestic : 0 International :						International :	0				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Porobić B. Vlado								
	e and last n lemic title:	iame:			Assistant Professor			
		titution v	where the te	eacher works full time and			nces - Novi Sad	
	ng date:	ilulion v	viiere trie te	acher works full time and	24.04.2000	orinioar colo	noo non caa	
Scie	ntific or art f	ield:			Power Electro	onics, Machi	ines and Facilities	
Acad	lemic carie	er	Year	Institution		·	Field	
Acad	lemic title el	lection:	2012	Faculty of Technical Scient	ences - Novi S	ad	Power Electronics, Machines and Facilities	
PhD	thesis		2012	Faculty of Technical Science	ences - Novi S	ad	Power Electronics, Machines and Facilities	
Magi	ster thesis		2005	Faculty of Technical Science	ences - Novi S	ad	Power Electronics, Machines and Facilities	
Bach	elor's thesis	S	2000	Faculty of Technical Science	ences - Novi S	ad	Power Electronics, Machines and Facilities	
List	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EE520	Desigr	n of Electric	al Machines and Converte	ers	Engineerin (E10) Pow	er, Electronic and Telecommunication g, Master Academic Studies er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EOS08	Electri	cal machine	es and devices		(E01) Pow	ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies	
3.	EOS18	Industi	rial Protoco	ls and Network		( E01) Pow Energy, Ur	ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
4.	EOS20	Electri	cal Drives a	and Control			ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies	
5.	EOS23	Wind E	Energy Con	version System		( E01) Power Engineering - Renewble Sources of Electrica Energy, Undergraduate Professional Studies		
6.	HE2465	Mecha	tronics of T	ransport and Construction	Machines		chanization and Construction Engineering, uate Academic Studies	
7.	EE424A	Power	Electronic	in Drive and Industry			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
8.	EE430	Contro	ol circuits in	power electronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
9.	EOS11	Applica	ation of mic	roprocessor in energetics		( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies		
10.	EOS26	Small	hydro plant	s		( E01) Power Engineering - Renewble Sources of Electrica Energy, Undergraduate Professional Studies		
11.	EE520	Desigr	n of Electric	al Machines and Converte	ers	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication		
12.	SI021	Power	Electronic	in Drive and Industry		( E00) Pow	g, Undergraduate Academic Studies  ver, Electronic and Telecommunication g, Specialised Professional Studies	
13.	SI031	Industi	rial Systems	s and Protocols		( E00) Pow	ver, Electronic and Telecommunication g, Specialised Professional Studies	
Rer	oresentative	reffere	nces (minin	num 5, not more than 10)		, <u> </u>		
1.			,	prom bez davača položaja	pri velikim hrzi	inama ohrta	nia. 2012.	
2.	V. Porobi	c, E. A	dzic , D. M	arcetic " High Speed Shaf	t Sensorless D	FOC Inducti	ion Motor Drive with Field Angle Correction," , 2011., ISSN 1827-6660, (M22).	
3.	V. Porobi	ć, E. Ad	lžić, D. Mar	četić, "Performance Evalu	ation of Field A	ngle Corre	ction Scheme for High Speed Sensorless IM", C 2012 ECCE Europe, Novi Sad, Serbia	
4.	Marčetić	Darko, I	Porobić Vla		ora u energetici		laboratorijskih vežbi , Novi Sad, Fakultet tehničkih	
5.	E. Adžić,	V. Poro	bić, D. Mar		polja vektorski	upravljanog 10.	g asinhronog motora pogodan za pogone u	
6.	V.Porobio	ć, D. Ma	rčetić, E. A		n motor drive ir	n high speed	d range - some aspects of digital implementation", bar 2010.	
7.	D. Reljić, Čorba, "N	D. Milić ⁄lodern l	ević, E. Ada aboratory t	žić, B. Dumnić, S. Grabić,	V.Porobić, M.	Vekić, Z. Iv	anović, V. Katić, V. Vasić, D. Marčetić, Đ. Oros, Z. al drives", XV Međunarodni simpozijum	

# TAS STUDIO REAL

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
8.	P. Matić, D. Marčetić, E. Adžić, V. Porobić, S. Vukosavić, "Projektovanje i izrada razvojnog okruženja za verifikaciju algoritma digitalnog upravljanja asinhronim motorom", Infoteh-Jahorina Vol. 8, Ref. A-10, p. 42-46, March 2009.								
9.	Z. Čorba, V. Katić, V. Porobić, "Mogućnosti korišćenja fotonaponskih panela na širem području Novog Sada", Konferencija ETRAN, Vrnjačka Banja, jun 2009.								
10.	J.Timer, E. Adžić, V. Porobić, D. Marčetić, "Int VOL. 13, NO. 1, June 2009	fluence of Rotor Time	Constant error on	IFOC Control Structure", El	LECTRONICS,				
Sui	mmary data for teacher's scientific or art and prof	essional activity:							
Quo	tation total :	0							
Tota	I of SCI(SSCI) list papers :	0	_						
Curr	ent projects :	Domestic :	0	International:	0				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last n	ame:				Prša A. Miroslav			
Acad	lemic title:					Associate Pro	ofessor		
Nam	e of the inst	titution v	vhere the te	acher works full time	e and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:					29.09.1975			
	ntific or art f			Г		Theoretical E	lectrotechni	CS	
Acad	lemic caries	er	Year	Institution				Field	
	Academic title election: 2010							Theoretical Electrotechnics	
PhD	thesis		1986	Faculty of Technic				Electrical and Computer Engineering	
Magi	ster thesis		1974	Faculty of Natural : Ljubljana	Scien	ces and Engine	eering -	Electrical and Computer Engineering	
Bach	elor's thesis	S	1971	Faculty of Natural Ljubljana	Scien	ces and Engine	eering -	Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredit	ted stu	udy programme	es		
	ID	Course	e name				Study pro	ogramme name, study type	
1.	EE300	Electro	omagnetics					er, Electronic and Telecommunication g, Undergraduate Academic Studies	
								chanization and Construction Engineering, luate Academic Studies	
							( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
2.	M112	Flectri	cal Enginee	ering and Electric Ma	achine	ne.		chnical Mechanics and Technical Design, luate Academic Studies	
	101112	Licotii	oai Enginee	and Electric Me	2011110		( P00) Pro	duction Engineering, Undergraduate Academic	
						( S00) Traf Academic	ffic and Transport Engineering, Undergraduate Studies		
								tal Traffic and Telecommunications, uate Academic Studies	
3.	Z107	Electri	cal Engine	ering, Environment a	nd Dr	otootion	` ′	ety at Work, Undergraduate Academic Studies	
J.	2107	LICCIII	cai Liigiiiee	ening, Environment a	iliu Fi	Otection -	Studies	ronmental Engineering, Undergraduate Academic	
4.	EE543	Electro	Magnetic	Energy			Engineerin	er, Electronic and Telecommunication g, Master Academic Studies	
5.	EM511	Quant	um and Org	ganic Electronics			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more thai	n 10)				
1.				nem vodniku pravok , Fakulteta za elektro				at u pravom provodniku pravougaonog poprečnog	
2.				mizaciji cikličnog pre ka, Novi Sad, 1986.	etvara	nja energije u r	magnetskim	kolima sa promenljivom reluktansom", doktorska	
3.				V. Bajović: Determir 007, Phuket, Tailand			dance, PSU	-UNS International Conference on Engineering	
4.		,	,	rša: Electric Field of nt – ICEE - 200, Phu			,	ms, PSU-UNS International Conference on	
5.								F of Voltage Measuring Trnasformer, 8th do 5. Septembar, 2007.	
6.				Prša: Electric Field S tromagnetics PES 2				Three-Phase Power Lines , 8th International nbar, 2007.	
7.				An Accurate Determ ES 2007, Niš, Srbija:				thin the Earth, 8th International Conference on	
8.	M. Prša:	Osnovi	elektrotehn	ike za studente neel	ektrot	ehničkih fakulte	eta, Novi Sa	d, Stylos, 1995. 248 str.	
9.	9. M. Prša, L. Juhas: Osnovi elektrotehnike za studente neelektrotehničkih fakulteta - zbirka zadataka, Novi Sad, FTN - Edicija Tehničke nauke, 2001. 178str., ISBN 86-80249-45-9.								
Sur	Summary data for teacher's scientific or art and professional activity:								
	Quotation total : 0								
	of SCI(SSO		apers :		0		I .		
Curre	Current projects : Domestic : 0 International : 0							International: 0	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name	e and last n	ame [.]			Radivojević D. Radoš					
	emic title:				Full Professor					
		titution v	vhere the te	eacher works full time and						
	ng date:	itation v	viioro uro u	dence works fall time and	01.09.1991					
	ntific or art f	ield:			Sociology					
Acad	emic carie	er	Year	Institution	Field					
Acad	emic title e	lection:	2001	Faculty of Technical Sci	ences - Novi S	ad	Sociology			
PhD	thesis		1990	Faculty of Philosophy - I	Novi Sad		Sociology			
Magi	ster thesis		1983	Faculty of Philosophy - I			Sociology			
	elor's thesis	S	1973	Faculty of Philosophy - I			Sociology			
List c	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es	•			
	ID	Course	e name			Study pro	ogramme name, study type			
1.	E106	Social	ogy of Took	ppique		Engineerin ( MR0) Me	ver, Electronic and Telecommunication g, Undergraduate Academic Studies asurement and Control Engineering, uate Academic Studies			
'.	E100	30000	ogy of Tech	ırılque		Ùndergrad	tware Engineering and Information Technologies, luate Academic Studies			
							tware Engineering and Information Technologies - indergraduate Academic Studies			
2.	E251	Sociolo	ogical Aspe	ects of Technical Developr	nent	Academic				
						( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies  ( E20) Computing and Control Engineering, Undergraduate				
3.	E251A	Sociole	ogical Aspe	ects of Technical Developr	ment	Academic	nputing and Control Engineering, Undergraduate Studies ver Software Engineering, Undergraduate			
4.	F108	Social	ogy of Cultu	Ire		Academic				
						Academic Studies				
5.	GG02			onomics in Civil Engineeri	ing		00) Civil Engineering, Undergraduate Academic Studies			
6.	GG105	Sociol	ogy of Worl	K		( G00) Civil Engineering, Undergraduate Academic Studie				
7.	M318	Sociolo	ogy of Tech	nnique		Studies	ineering Animation, Undergraduate Academic desy and Geomatics, Undergraduate Academic			
						( H00) Mechatronics, Undergraduate Academic Studies				
8.	Z310	Social	Ecology			(Z20) Envi Studies	ronmental Engineering, Undergraduate Academic			
9.	A206	Sociol	ogy and Ec	onomy of the Built Enviror	ment	( A00) Arcl	hitecture, Undergraduate Academic Studies			
10.	ASO311	Sociol	ogy of Art a	and Culture		Ùndergrad	enic Architecture, Technique and Design, uate Academic Studies			
11.	ETI41	Sociol	ogy of Tech	nnique		Profession				
12.	IM1003	Sociology of Work			Studies	strial Engineering, Undergraduate Academic neering Management, Undergraduate Academic				
13.	A005S	Urban sociology and economics: selected chapters			chapters	( A00) Architecture, Specialised Academic Studies				
14. ZRMI3A Sociological and Legal Aspects of Occupational Saf					ional Safety	( Z01) Safe	ety at Work, Master Academic Studies			
15.	A005	Urban	Sociology	and Economics – Selected	d Chapters	( A00) Arcl	hitecture, Doctoral Academic Studies			
Representative refferences (minimum 5, not more than 10)										
1. Sociologija nauke, Stylos, Novi Sad, 1997.										
2. Tehnika i društvo, Fakultet tehničkih nauka, Novi Sad, 2003.  Osebsogija matike, etyles, Novi Sad, 2003.										
-+			-		•					
٥.	3. Sociologija naselja, Fakultetet tehničkih nauka, Novi Sad, 2004.									

# TE STUDIO STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)									
4.	Fakultet tehničkih nauka-Razvoj, delatnost, rez	zultati, Novi Sad, 2006								
5.	Karakteristike inženjersko ekonomskog proučavanja organizacije rada, Sociološki pregled br. 1-2, Beograd, 1984.									
6.	Socijalizam kao neproduktivni sistem, Sociološ	ski pregled br 1-2, Beo	grad, 1994.							
7.	Karakteristike empirijskog proučavanja organiz	acije rada, Sociologija	br 4, 1985.							
8.	Milićeva sociogija saznanja, Sociogija br 4, Beograd, 1997.									
9.	Socio-psychological consequeences of the floo 2006.	od-an Example of Jasa	a Tomic, Editors:S	Stevan Bruk&Tiosav Petkovi	c, Belgrade,					
10.	Gordana Vuksanović, Radoš Radivojević, THE CONSEQUENCES OF NATURAL DISASTER		N IN INVESTIGA	TING AND ELIMINATING TI	HE					
Sui	mmary data for teacher's scientific or art and profe	essional activity:								
Quo	tation total :	0								
Tota	Total of SCI(SSCI) list papers: 3									
Curr	ent projects :	Domestic :	2	International :	1					

# DE 3C

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Rakarić Đ. Zvonko			
_	emic title:				Assistant Professor			
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				15.11.1999			
Scier	ntific or art f	ield:			Mechanics			
Acad	emic carie	er	Year	Institution			Field	
Acad	emic title e	lection:	2012				Mechanics	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Technical Mechanics	
Magi	ster thesis		2009	Faculty of Technical Sci	ences - Novi S	ad	Mechanics	
Bach	elor's thesi	S	1999	Faculty of Technical Sci	ences - Novi S	ad	Mechanics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E104	Mecha	inics			Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
						Undergrad	asurement and Control Engineering, uate Academic Studies	
2.	F107	Techn	ical Mechar	nics		Académic		
3.	GG14	Mecha	nics 2				l Engineering, Undergraduate Academic Studies	
4.	IAKI01	Select	ed Chapter	s in Kinematics		( F10) Eng Studies	ineering Animation, Undergraduate Academic	
5.	M103	Mecha	inice 1			Undergrad	chanization and Construction Engineering, uate Academic Studies ergy and Process Engineering, Undergraduate Studies	
5.	W1103	Mechanics 1				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
6.	M107	Mecha	inics 2			( M30) Energy and Process Engineering, Undergrad Academic Studies		
						( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
						( P00) Production Engineering, Undergraduate Academic Studies		
						Undergrad	chanization and Construction Engineering, uate Academic Studies	
7.	M201	Mecha	inics 3			( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
,.	WIZOT	Wiconio					chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
						Undergrad	chanization and Construction Engineering, uate Academic Studies	
8.	M2411	Theory	of Oscillat	ion			chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
9.	M4301	Computer Methods in Mechanics				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
10.	M45021	Comp	uter Method	ds in Mechanics 2		( M40) Technical Mechanics and Technical Design, Master Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



				g					
Rep	presentative refferences (minimum 5, not more th	nan 10)							
1.	Rakarić Z., Kovačić I.: An elliptic averaging me power restoring force, in press, Communication								
2.	Rakarić Z., Kovačić I.: Approximations for mot Sound and Vibration, 2011, No 330, pp. 321-3		rith a non-negativ	e real power restoring	force, Journal of				
3.	Kovačić I., Rakarić Z.: Study of oscillators with a non-negative real-power restoring force and quadratic damping, Nonlinear Dynamics, 2011, Vol. 64, No 3, pp. 293-304, ISSN 0924-090X, UDK: DOI: 10.1007/s11071-010-9861-9								
4.	Cyaticanin I. Kovačić I. Rakarić Z. Asymptotic methods for vibrations of the pure fractional order non-linear oscillators								
5.	Kovačić I., Rakarić Z.: Oscillators with a fractional-order restoring force: higher-order approximations for motion via a modified Ritz method, Communication in Non-linear Science and Numerical Simulations, 2010, Vol. 15, pp. 2651-2658, ISSN 1007-5704								
6.	Kovačić I., Rakarić Z., Cvetićanin L.: A non-simultaneous variational approach for a certain class of non-linear oscillators , Applied Mathematics and Computation, 2010, Vol. 217, pp. 3944-3954, ISSN 0096-3003								
7.	Rakarić Z.: Oscillators with a quasi-constant re	estoring force: approxi	mations for motio	n, Meccanica, 2010, IS	SSN 0025-6455				
8.	Rakarić Z., Kovačić I.: Oscillators with a purely forced response via elliptic functions and avera ISBN ISBN 978-88-906234-2								
9.	Rakarić Z., Kovačić I.: On the behaviour of for damping, 3. International Congress of Serbian 86-909973-3-6								
10.	10. Rakarić Z., Zuković M.: Iteration method solutions for oscillators with sign(x)Abs(x)^alfa elastic force, 2. International Congress of Serbian Society of Mechanics, Palić, 1-5 Jun, 2009, pp. 1-10, ISBN 978-86-7892-173-5, UDK: paper A14								
Sur	Summary data for teacher's scientific or art and professional activity:								
Quot	tation total :	20							
Tota	l of SCI(SSCI) list papers :	6							
Curre	ent projects :	Domestic :	1	International:	1				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Rakić S.						S. Predrag		
Academic title:					Assistant Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
	starting date:							
Scie	ntific or art f	ield:			Applied Comp	outer Science	ce and Informatics	
Acad	lemic caries	er	Year	Institution		Field		
Acad	lemic title e	lection:	2011	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
Magi	ster thesis		2006	Faculty of Technical Sci	ences - Novi Sa	ad	Applied Computer Science and Informatics	
Bach	elor's thesi	S	2001	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E225	Opera	ting System	s		Academic	nputing and Control Engineering, Undergraduate Studies ver Software Engineering, Undergraduate	
						Academic	Studies	
2.	EE301	Opera	ting System	s and Competitive Progra	amming	Ùndergrad	easurement and Control Engineering, luate Academic Studies	
		-	-			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	ISIT04	Osnov	e računara			Undergrad	vare and Information Technologies (Inđija), luate Professional Studies	
4.	SE0014	Compi	uter organis	ation		( SE0) Software Engineering and Information Technolog Undergraduate Academic Studies		
7.	020014	Compt	ater organis	auon		( SEL) Sof Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
5.	SE0031	Opera	ting System				tware Engineering and Information Technologies, luate Academic Studies	
5.	350031	Opera	ung System	5			tware Engineering and Information Technologies - Indergraduate Academic Studies	
	050000	0	: 1 11-4-	December		( SE0) Sof Undergrad	tware Engineering and Information Technologies, luate Academic Studies	
6.	SE0033	Gener	ic and ivieta	Programming		( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
7.	SEM099	Progra	amm Optimi	zation		( SE0) Software Engineering and Information Technologies, Master Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.		etric nor					PI–CUDA parallelization of a finite-strip program oftware, 2011, Vol. 42, No 5, pp. 273-285, ISSN	
2.	Hajdukov Harmonio	rić M., M	ed Finite Str		ge Displaceme	nt Stability A	pe of MPI/OpenMP/CUDA Parallelization of Analysis of Prismatic Shell Structures, Computer SN 1820-0214	
3.	Živanov Ž	Ž., Rakić	ć P., Hajduk		ucational opera	ting system	, Computer Science and Information Systems	
4.		Stričevi	ić L., Suvajo				can Conference in Informatics, Novi Sad, 16-20	
5.	Stričević MPI Clus	L., Raki ter by U	ć P., Hajdul Ising Multipl		komunikacioni		Program Execution Speed Improvement on an FOR, Beograd: Telecommunications Society, 20-	
6.				ović M.: Wireless sensor stems (ComSIS), 2008, Vo			amming and simulation system, Computer SN 1820-0214	
7.	Živanov Ž. Pakić D. Hajduković M.: Using gode gonoration appraach in developing kinck applications. Computer Science and							
8.	Milašinov	rić D., Ži	ivanov Ž., F		olić M., Hajduk		ković A., Milaković I.: A Finite-Strip Analysis of	
9.	Milašinov using the	rić D., Bo Harmoi	orković A., z nic Coupled	Živanov Ž., Rakić P., Hajd Finite-Strip Method	luković M., Furt	tula B.: Lar	ge Displacement Stability Analysis of Columns	
			· ·					

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication
Engineering



	Engineering										
Re	Representative refferences (minimum 5, not more than 10)										
10	Rakić P., Stričević L., Živanov Ž., Suvajdžin Z., Hajduković M.: Računarska učionica - iskustva u pripremi i korišćenju, INFO M, Beograd, 2007, Vol. 6, No 21, pp. 9-13, ISSN 1450-6254, UDK: 659.25										
Sı	ummary dat	a for teacher's scientific or art and profe	essional activity:								
Quo	otation total	:	0								
Tot	al of SCI(S	SCI) list papers :	5								
Cur	rent project	s:	Domestic :	1	International :	0					



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last n	ame:				Salamon D. Dragutin					
	demic title:					Associate Professor					
Nam	e of the inst	titution v	vhere the te	eacher works full time	e and	School of Ele	ctrical Engir	neering - Beograd			
	ing date:	atation v	VIII 010 110 10	donor works run time	o una	01.10.1973					
Scie	ntific or art f	ield:				Electroenerge	etic Systems	<u> </u>			
Acad	demic carie	er	Year	Institution			J	Field			
Acad	demic title e	lection:	2011					Electroenergetic Systems			
PhD	thesis		1992					Electroenergetic Systems			
Mag	ister thesis		1978					Electroenergetic Systems			
	nelor's thesis	S	1973					Electroenergetic Systems			
List	of courses b	eina he	ld bv the te	acher in the accredit	ted stu	udv programme	es	<u> </u>			
	ID	Course	e name			7, 0	Study pro	gramme name, study type			
1.	. EE0400 Electrical Substations 1							asurement and Control Engiruate Academic Studies	neerir	ng,	
'.	LL0400	LICOLIT		10113 1				er, Electronic and Telecomm g, Undergraduate Academic			
2.	DE116S	Electri	cal Substat	ions 2				ver, Electronic and Telecomn g, Specialised Academic Stu		ation	
3.	EE400	Electri	cal Substat	ions			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
4.	DE116	Electri	cal Substat	ions 2				er, Electronic and Telecomn g, Doctoral Academic Studie		ation	
Re	presentative	reffere	nces (minin	num 5, not more tha	n 10)						
J. Nahman, D. Salamon, "Safety Analysis at Overhead Line Towers in Close Proximity to the Substation", IEEE Transaction on Power Delivery (ISSN 0885-8977), Vol. 25, No. 3, July 2010., pp. 1508-1515. (IF 1.289)											
2.	on Power	r Appara	mon D., "Ar atus and Sy odelio na 3	stems (ISSN 0018-9	s for T 9510),	he Resistance Vol. PAS-103,	of Groundir April 1984.,	ng Grids in Nonuniform Soil", pp. 880-885, (IF 0.390); (ča	IEEE sopis	Transactions izlazio do	
3.								and of Combined Grounding PWRD-1, July 1986., pp. 90-			
4.								stivity Data Obtained From E 38., pp. 1375-1379. (IF 0.145		Rod Tests",	
5.	Nahman Groundin (IF 0.247	g Syste	amon D., "E ms", IEEE	ffects of The Metal S Transactions on Pov	Sheath wer De	ned Cables Up elivery (ISSN 0	on ThePerfo 885-8977), \	ormance of The Distribution S /ol. PWRD-7, No.3, oct. 199	Substa 2., pp	ations . 1179 – 1187	
6.								ximum Mesh-voltages of Cor RD-11, No. 3, July 1996. pp.			
7.								lysis of Experimental Determ 7), Vol. 13, No. 4, Oct. 1998.			
8.								nvestigation of Grounding Gr )-144X), Vol. 8, Nov./Dec. 19			
9.								ground Cables Associated W No. 1, January 2002. pp. 111			
J. Nahman, D. Salamon, Z. Stojkovic, J. Mikulovic, "Rationalization of operation of an industrial network", Electric Power System Research (ISSN 0378-7796), 78(2008), pp. 1664-1671, (IF 0.952)											
Summary data for teacher's scientific or art and professional activity:											
Quotation total: 70											
Tota	Total of SCI(SSCI) list papers : 1										
Curr	Current projects : Domestic :						0	International :		0	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name	e and last n	ame:				Samardžija M. Dragan			
	emic title:					Assistant Professor			
Name	e of the inst	itution v	vhere the te	eacher works full time	e and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:					01.11.2008			
Scier	ntific or art f	ield:		T-		Computer En	gineering ar	nd Computer Communication	
Acad	emic carie	er	Year	Institution				Field	
Acad	emic title e	ection:	2008	Faculty of Technica	al Sci	ences - Novi S	ad	Computer Engineering and Computer Communication	
PhD	thesis		2004	Rutgers University	- Nev	vark, New Jers	еу	Electrical and Computer Engineering	
Magi	ster thesis		2000	Rutgers University	- Nev	vark, New Jers	еу	Electrical and Computer Engineering	
Bach	elor's thesi	3	1996	Faculty of Technica	al Sci	ences - Novi S	ad	Electrical and Computer Engineering	
List c	of courses b	eing he	ld by the te	acher in the accredit	ed stu	udy programme	s		
	ID	Course	e name				Study pro	gramme name, study type	
							( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
1.	E23B	Funda	mentals of	Computer Networks	1		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
								er, Electronic and Telecommunication g, Undergraduate Academic Studies	
							( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
2.	E23B1	Compi	uter Networ	k Fundamentals 2			( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
								er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	SE0015	Prenos	s podataka	i računarske komuni	ikacije	)		tware Engineering and Information Technologies - ndergraduate Academic Studies	
4.	RT511	Practio	cum in com	puter engineering an	nd con	nputer	( E20) Con Academic	nputing and Control Engineering, Master Studies	
т.	KISII	comm	unications				( SE0) Software Engineering and Information Technologies Master Academic Studies		
5.	DRT08	Select	ed Topics i	n Wireless Computer	r Com	nmunications	( E20) Con Academic	nputing and Control Engineering, Doctoral Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more thar	n 10)				
1.				Channel State Inform 54, str. 1335- 1345	nation	Feedback in M	Iultiple Ante	nna Multiuser Systems, IEEE Transactions on	
2.	Blind Suc 276- 290	cessive	Interference	ce Cancellation for D	S-CD	MA Systems, I	EEE Transa	actions on Communications, 2002, Vol. 50, str.	
3.				MIMO Fading Chanr tr. 2882- 2890	nel Re	esponse and Ad	chievable Da	ata Rates, IEEE Transactions on Signal	
4.			nsport of B 3216 - 3225		Radio	Access Netwo	rks, IEEE Tr	ransactions on Wireless Communications, Volume	
5.	Peer-to-F 6, str. 322			Channel Measuremer	nts in	a Rural Area, I	EEE Transa	actions on Wireless Communications, 2007, Vol.	
6.				chievable Data Rates sceivers, 2007, Vol. 2			Multiuser T	DD Systems, IEEE JSAC, Special Issue on	
7.	, ,		ence for MI 21, str. 440		rd Ge	neration Wirele	ess System,	IEEE JSAC on MIMO Systems and Applications:	
8.				or Audio Streaming ir 6- 491, ISSN ISSN: 0			ess Network	s, IEEE Transactions on Consumer Electronics,	
9.				for Residential Smar 8, no.3, pp.819-824,		0, ,	ased on Zig	bee RSSI Changes, IEEE Transactions on	
10.	10. Experimental Evaluation of Unsupervised Channel Deconvolution for Wireless Multiple-Transmitter/Multiple-Receiver Systems, Electronics Letters IEE, 2002, Vol. 38, No. 20, str. 1214- 1216								
Sun	Summary data for teacher's scientific or art and professional activity:								
	ation total :	- · · ·			311				
Total	Total of SCI(SSCI) list papers : 11								

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Current projects: Domestic: 0 International: 0



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Sarić T. Andrija			
Acad	lemic title:				Associate Pro	fessor		
	e of the inst	itution v	vhere the te	eacher works full time and	-			
Scier	ntific or art f	ield:			Electroenerge	etics		
Acad	lemic carie	er	Year	Institution		Field		
Acad	lemic title el	ection:	2012				Electroenergetics	
PhD	thesis		1997	School of Electrical Engi	ineering - Beog	rad	Electroenergetics	
Magi	ster thesis		1992	School of Electrical Engi	ineering - Beog	rad	Electroenergetics	
	elor's thesis	3	1988	School of Electrical Engi			Electroenergetics	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	:S		
	ID	Course	e name			Study pro	gramme name, study type	
1.	EE411B	Exploit	tation of PE	S		Academic (E10) Pow	ver Software Engineering, Undergraduate Studies er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	ESI018	GIS in	power syst	ems		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
3.	ESI019	Critica	l mission so	oftware for power grids		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
4.	DE307S	Planni	ng and Opt	imization of Power Systen	n Plant		ver, Electronic and Telecommunication g, Specialised Academic Studies	
5.	DE407S	Regula	ation and D	istribution Network Manag	jement	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
6.	DE513S	Advan	ced Method	ds of Monitoring and Mana	agement		ver, Electronic and Telecommunication g, Specialised Academic Studies	
7.	DE314S	Select Syster	ed Chapter ns – EMC a	s in System Management and DMS	in Power		ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	DE519S	PES P	lanning			, ,	ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	DE307	Planni	ng and Opt	imization of Power Systen	n Plant	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
10.	DE407	Regula	ation and C	ontrol of Electric Power Sy	ystems	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
11.	DE513	Advan	ced Method	ds of Monitoring and Mana	agement	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
12.	DE314	Select Syster	ed Chapter ns – EMC a	s in System Management and DMS	in Power		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
13.	DE519	PES P	lanning			, ,	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.				Planiranje elektroenergetsl , 2000, 342 strane, ISBN 8			sipi i metodologija planiranja elektroenergetskih 11:65.012(075.8).	
2.				Osnovi analize elektroener ISBN 86-7466-134-3, CIP			Akademska misao i Tehnički fakultet u Čačku,	
3.				. Č. Stefanov, "Eksploatao trana, ISBN 86-7776-006-			ema u uslovima slobodnog tržišta", Tehnički	
4.				A., Stanković A.: Two-St tems, 2009, Vol. 24, No 3			ing Model for Market Clearing with Contingencies	
5.				ications of Ellipsoidal ms, 2008, Vol. 23, No 3, p		to Polyhed	ral Sets in Power System Optimization, IEEE	
6.	6. Sarić A., Stanković A., Stanković A.: An Application of Interval Analysis and Optimization to Electric Energy Markets, IEEE Transaction on Power Systems, 2006, Vol. 21, No 2, pp. 515-523							
7.				gration of Equation and Sig I Systems I, 2006, Vol. 53			sient Analysis of Electric Energy Systems, IEEE	
8.			vić A.: Mod . 1398-140		Assessment of	Power Syst	tems, IEEE Transaction on Power Systems, 2005,	

# ASTRAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)

- 9. Stanković A., Sarić A.: Transient Power System Analysis with Measurement-Based Gray Box and Hybrid Dynamic Equivalents, IEEE Trans. on Power Systems, 2004, Vol. 19, No 1, pp. 455-462
- 10. Sarić A., Ćirić R.: Integrated Fuzzy State Estimation and Load Flow Analysis in Distribution Networks, IEEE Trans. on Power Delivery, 2003, Vol. 18, No 2, pp. 571-578

	Delivery, 2003, Vol. 16, No 2, pp. 571-576									
Su	Summary data for teacher's scientific or art and professional activity:									
Quo	tation total :	140								
Tota	al of SCI(SSCI) list papers :	21								
Curr	rent projects :	Domestic :	2	International:	0					

# ASTRONOMICS OF THE PROPERTY OF

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Satarić V. Miljko			
Acad	lemic title:				Full Professor			
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				03.01.1973			
Scie	ntific or art f	ield:			Physics			
Acad	lemic cariee	er	Year	Institution			Field	
Acad	lemic title el	ection:	1995	Faculty of Technical Sci	ences - Novi S	ad	Physics	
PhD	thesis		1984	School of Electrical Eng	ineering - Beog	ırad	Physics	
Magi	ster thesis		1979	School of Electrical Eng	ineering - Beog	ırad	Physics	
Bach	elor's thesis	3	1972	Faculty of Sciences - No	ovi Sad		Physics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
							ver, Electronic and Telecommunication	
1.	E103	Physic	s			_	ng, Undergraduate Academic Studies	
							asurement and Control Engineering, luate Academic Studies	
	F245	Dh. as ! -					nputing and Control Engineering, Undergraduate	
2.	E215	Physic	S			Academic Studies		
						( Z01) Safety at Work, Undergraduate Academ		
3.	Z103	Select	ed Chapters	s in Physics 1		(Z20) Environmental Engineering, Undergraduate Acadel Studies		
					( Z01) Safety at Work, Undergraduate Academic Stu			
4.	Z110	Select	ed Chapters	s in Physics 2	(Z20) Environmental Engineering, Undergraduate Studies			
5.	El410	Biophy	sics				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	DE203S	Odabr	ana poglavl	ja iz kvantne elektronike		( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
7.	DE301S	Molekı	ularna elekt	ronika(uneti naziv na eng	leskom)		ver, Electronic and Telecommunication g, Specialised Academic Studies	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
8.	DZ01FS	Select	ed Chapters	s in Physics			neering Management, Specialised Academic	
					( Z00) Env Studies	ironmental Engineering, Specialised Academic		
9.	EM511	Quanti	um and Org	anic Electronics			er, Electronic and Telecommunication g, Master Academic Studies	
10.	SI028	Biophysics					ver, Electronic and Telecommunication ig, Specialised Professional Studies	
11.	DE203	Selected Chapters in Quantum Electronics				(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
12.	DE301	Molecu	ular Electroi	nics		(E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List c	List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programi	me name, study type					
				( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies						
			<ul> <li>(E20) Computing and Control Engineering, Doctor Academic Studies</li> <li>(F00) Graphic Engineering and Design, Doctoral A Studies</li> </ul>							
				c Studies						
				( GI0) Geodesy	and Geomatics, Doctoral Ad	cademic Studies				
	DZ01F			( H00) Mechatro	nics, Doctoral Academic St	udies				
13.		Selected Chapters in Physics		( I20) Industrial E Doctoral Acader	Engineering / Engineering N nic Studies	lanagement,				
				( M00) Mechanio	cal Engineering, Doctoral Ad	cademic Studies				
				( M40) Technica	l Mechanics, Doctoral Acad	lemic Studies				
				( OM1) Mathema Studies	atics in Engineering, Doctor	al Academic				
				( S00) Traffic En	gineering, Doctoral Acaden	nic Studies				
				( Z00) Environmental Engineering, Doctoral Academic Studies						
				( Z01) Safety at	Work, Doctoral Academic S	studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.		ković, M.V. Satarić, "Single-Molecule l hys.Rev.E73,021905-11,2006.	Jnzipping Experiments	s on DNA Peyrard	I-Bishop-Dauxois					
2.	of tubulin	zynski, J. A. Brown, E. Crawford, E. J structure and calculations of electros b. 1055-1070, 2005.								
3.		ć, B. Satarić, J. A. Tuszynski, "Nonline 255-264, 2005.	ear model of microtubu	ule dynamics", Ele	ectromagnetic Biology and N	Medicine, vol.24,				
4.		ković J. A. Tuszynski, M. Satarić "Peyr tional and Theoretical Nanoscience, v			amics and impact of viscosi	ity", Journal of				
5.		cović, M. Satarić, "Optical and Acousti Letters 22, pp. 850-853, 2005.	cal Frequencies in a N	Ionlinear Helicoid	al Model of DNA Molecule",	, Chinese				
6.	S. Portet, influence	J. A. Tuszynski, J. M. Dixon, M. Sata of gravitational fields", Physical Review	rić, "Models of spatial ew E, vol. 68, no. 2, 20	and orientational	self-organization of microtu	bules under the				
7.	M. Satari	ć, J. A. Tuszynski, "Relationship betw , vol. 67, no. 1, 2003.			d crystal models for microtu	bules", Physical				
8.	S. Zdravl 5911-592	ković, M. Satarić, "DNA dynamics and 23, 2003.	big viscosity", Interna	tional Journal of N	Modern Physics B, vol.17, n	o. 31-32, pp.				
9.		ć, J. A. Tuszynski, "Impact of regulato	ry proteins on the non	linear dynamics o	of DNA", Physical Review E	, vol. 65, no. 5,				
10.		rić, D. Raković, M. Satarić, D. Koruga, Research in Advanced Materials and F			ort through microtabular cyto	oskeleton",				
Sur	Summary data for teacher's scientific or art and professional activity:									
Quot	ation total :	·	295							
Total	Total of SCI(SSCI) list papers : 67									
Curre	Current projects : Domestic : 1 International : 2									

# A STUDIO OF STATE OF

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Nam	e and last n	ame.			Sečujski S. Milan			
Academic title:					Assistant Pro			
		titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				15.06.2000			
Scier	ntific or art f	ield:			Telecommun	Signal Processing		
Acad	emic carie	er	Year	Institution			Field	
Acad	emic title e	lection:	2010	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
PhD	thesis		2009	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
Magi	ster thesis		2002	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
Bach	elor's thesis	S	1999	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EK314	Digital	Signal Prod	cessing		Undergrad	asurement and Control Engineering, luate Academic Studies	
		-					er, Electronic and Telecommunication  g, Undergraduate Academic Studies	
2.	EK411	Digital	Filters			(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( F10) Eng Studies	ineering Animation, Undergraduate Academic	
3.	EK421	Digital	Image Prod	cessing			tal Traffic and Telecommunications, uate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	Z413A	Acous	tics and No	ise Protection		(Z20) Envi	ronmental Engineering, Undergraduate Academic	
5.	BM118B	Acous	tics and Au	dio Engineering in Medicir	ne	Studies	medical Engineering, Undergraduate Academic	
6.	E137	Basics	of Telecon	nmunications		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
7.	EK312	Acous	tics and Au	dio Engineering		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
8.	EK312L	Acous	tics and Au	dio Engineering in Multime	edia	Studies	ineering Animation, Undergraduate Academic	
9.	EK422	Digital	Audio Sign	al Processing		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	ETI27	Audio	Engineerin	9		Profession		
11.	ETI35	Digital	Sound Pro	cessing		Profession		
12.	EK521	Inform	ation and C	communication Theory		Académic		
						Èngineerin	er, Electronic and Telecommunication  ng, Master Academic Studies	
13.	EK522	Comp	uter Vision (	Digital Image Processing	2)	(E10) Pow	ineering Animation, Master Academic Studies er, Electronic and Telecommunication ig, Master Academic Studies	
14.	S0151		ation of Dig	ital Signal Processing in		— <u> </u>	tal Traffic and Telecommunications, Master	
15.	SI036	Comp	uter-Teleph	ony Integration			ver, Electronic and Telecommunication g, Specialised Professional Studies	
16.	SI037	Telecommunication Infrastructure of E-Bu			ness	( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies		
17.	BMIM2A	Assistive Information and Communication			Technologies	( BM0) Biomedical Engineering, Master Academic Studies		
18. EK422L Digital Audio Signal Processing						( F20) Eng	ineering Animation, Master Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)							
1.	Milan Sečujski, Radovan Obradović, Darko Pekar, Ljubomir Jovanov, Vlado Delić: "AlfaNum System for Speech Synthesis in Serbian Language", Lecture Notes in Artificial Intelligence – Subseries of Lecture Notes in Computer Science, 2002, pp. 237- 244, ISSN 0302-9743.							
2.	Bojović Ž., Perić Z., Delić V., Šećerov E., Seču a live VoIP network using SIP protocol", Electro							
3.	Popović B., Janev M., Pekar D., Jakovljević N. Hierarchical Clustering of Gaussian Mixture Mo (2012), pp. 377-389, ISSN 0924-669X							
4.	Delić V., Bojanić M., Gnjatović M., Sečujski M., Jovičić S.: Discrimination capability of prosodic and spectral features for emotional speech recognition DOI: http://dx.doi.org/10.5755/j01.eee.18.9.2806, Electronics and electrical engineering, 2012, Vol. 18, No 9, pp. 51-54, ISSN 1392-1215							
5.	Delić V., Sečujski M., Jakovljević N., Janev M., Obradović R., Pekar D.: "Speech Technologies for Serbian and Kindred South Slavic Languages", 9th Chapter in the book Advances in Speech Recognition, Noam R. Shabtai (Ed.) Available from: http://www.intechopen.com/articles/show/title/speech-technologies-for-serbian-and-kindred-south-slavic-languages, SCIYO, 2010, str. 141-164, ISBN 978-953-307-097-1							
6.	Pekar D., Mišković D., Knežević D., Vujnović Sedlar N., Sečujski M., Delić V.: "Applications of Speech Technologies in Western Balkan Countries", 7th Chapter in the book Advances in Speech Recognition, Noam R. Shabtai (Ed.) Available from http://www.intechopen.com/articles/show/title/applications-of-speech-technologies-in-western-balkan-countries, SCIYO, 2010, str. 105-122. ISBN 978-953-307-097-1							
7.	Sečujski M.: "Development of language resour "Speech and Language: Interdisciplinary Rese 139, UDK: ISBN 978-86-81879-27-6	rces for the Serbian la arch III", Eds.: S. T. Jo	nguage required f vičić, M. Sovilj, B	for part-of-speech tagging", ( eograd, LAAC and IEPPS, 2	Chapter in book: 1009, str. 125-			
8.	Milan Sečujski: A Software Tool for Automatic Part-of Speech Tagging in Serbian Language, Primenjena lingvistika, 2008, No. 9, pp. 97- 103, UDK: 004.934 : 004.4, ISSN 1451-7124.							
9.	Vlado Delić, Darko Pekar, Radovan Obradović, Milan Sečujski: "Speech Signal Processing in ASR&TTS Algorithms", Facta Universitatis (Niš), Series: Electronics and Energetics, 2003, Vol. 16, No. 3, pp. 355- 364, ISSN 0353-3670.							
10.	Jakovljević N., Sečujski M., Delić V.: Vocal Tract Length normalization strategy based on maximum likelihood criterion, 8. EUROCON, Sankt Peterburg: IEEE, 18-23 Maj, 2009, pp. 417-420, ISBN 978-1-4244-3861-7							
	mmary data for teacher's scientific or art and profe	essional activity:						
	ation total :	0						
	Total of SCI(SSCI) list papers: 4							
Curre	Current projects : Domestic : 2 International : 0							



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

					Simić S. Srboljub			
Academic title:			Full Professor					
			Faculty of Technical Sciences - Novi Sad					
starting date:			25.11.1993					
Scie	ntific or art f	ield:			Mechanics			
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title el	lection:	2010	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
PhD	thesis		1999	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
Magi	ster thesis		1997	Faculty of Mathematics	- Beograd		Mechanics	
Bach	elor's thesis	S	1993	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanical Engineering	
List o	of courses b	eing hel	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E104	Mecha	ınics			Èngineerin	ver, Electronic and Telecommunication g, Undergraduate Academic Studies asurement and Control Engineering,	
							uate Academic Studies	
2.	GG07	Mecha	nics 1			( G00) Civi	Il Engineering, Undergraduate Academic Studies	
3.	M4305	Therm	omechanic	s			chnical Mechanics and Technical Design, uate Academic Studies	
4.	Z108	Funda	mentals of	Mechanics		( Z01) Safety at Work, Undergraduate Academic Studies ( ZC0) Clean Energy Technologies, Undergraduate Academic Studies		
						(Z20) Environmental Engineering, Undergraduate Academic Studies		
5.	M44031	Analytical mechanics				( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies		
6.	M4505	Modelling of non-linear systems				( M40) Teo Academic	chnical Mechanics and Technical Design, Master Studies	
7.	BMIM4A	Transp	ort phenon	nena and Living systems		(BM0) Bio	medical Engineering, Master Academic Studies	
8.	DM407	Nonlin	ear Mechai	nics with Nonconservative	Properties	( M00) Mechanical Engineering, Doctoral Academic Studies     ( M40) Technical Mechanics, Doctoral Academic Studies     ( OM1) Mathematics in Engineering, Doctoral Academic Studies		
9.	DSIM8	Selecte	ed Chapter	s in Dynamics and Contro	l	( M40) Ted	chnical Mechanics, Doctoral Academic Studies	
10.	DZ003	Select	ed Chapter	s in Mechanics		( M00) Med	chanical Engineering, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Srboljub :	S. Simić e nauke	: Analitička - udžbenic	mehanika: dinamika, stat ", 415 str., ISBN 86-8521	oilnost, bifurkad 1-83-2	ije, Fakultet	tehničkih nauka, Novi Sad 2006., Edicija	
2.				Maretić: Osnove mehaniko	e, Fakultet tehr	ičkih nauka	, Novi Sad 2008., Edicija "Tehničke nauke -	
3.			. Kawaguc 8 (3), pp. 2		lass of Conserv	ation Laws	of Linear Time-Dependent Dynamical Systems,	
4.		nackovic	, S.S. Simi		hape of a Pflüg	jer column,	European Journal of Mechanics, A/Solids, 18 (5),	
5.	S.S. Simi	c (2002	), On the sy	mmetry approach to polyl Linear Mechanics, 37, pp.			of one-dimensional Lagrangian systems,	
6.				Non Linear Wave Propag 25-148.<\eng>	ation in Binary	Mixtures of	Euler Fluids, Continuum Mechanics and	
7.				On the Hyperbolic system matical Methods in the Ap			uids: a comparison between single- and multi- 7-849.<\eng>	
8.	T. Buggeri, S. Simié (2000) Average temperature and Maywellian iteration in multitemperature mixtures of fluids. Physical Review							
9.				Pilipović, S. Simić (2009) Analysis: Theory, Method			fractional derivatives: Invariance conditions and , pp. 1504-1517	
10.						s, Nonlinea	rity, vol. 20, pp. 1337-1366	

# STAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Summary data for teacher's scientific or art and professional activity:							
Quotation total :							
Total of SCI(SSCI) list papers :	9						
Current projects :	Domestic :	1	International :	1			

# FACL

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name: Sladić S. Gor					an			
Academic title: Assistant Pr			Assistant Pro	fessor				
					chnical Sciences - Novi Sad			
starting date: 01.02.2004 Scientific or art field: Applied Comp								
					Applied Comp	outer Scienc	ce and Informatics	
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2011	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Computer Science	
Magi	ster thesis		2006	Faculty of Technical Sci			Computer Science	
	elor's thesi		2002	Faculty of Technical Sci			Computer Science	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
1.	E239A	Web F	Programmin	α		( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies	
	,	39A   Web Programming				Undergrad	easurement and Control Engineering, luate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication ng, Undergraduate Academic Studies	
						(E20) Computing and Control Engineering, Undergraduate Academic Studies		
2.	E2E41	E-Business Systems Security			( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
						( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies		
							tware Engineering and Information Technologies - Indergraduate Academic Studies	
		Distributed Artificial Intelligence and Intelligent Agents				( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
3.	E2K41				ent Agents	Undergrad	easurement and Control Engineering, luate Academic Studies	
0.	LZKT				on Agonto	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies		
						( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies		
4.	EOS36	Elektro	onsko poslo	vanje i ugovaranje		( E01) Pow Energy, Ur	ver Engineering - Renewble Sources of Electrical indergraduate Professional Studies	
5.	F501	WEB [	Design			( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies	
J.	1 301	**CDL	203igi1			( F10) Eng Studies	ineering Animation, Undergraduate Academic	
6.	ISIT10	Introdu	uction to So	ftware Development			vare and Information Technologies (Inđija), luate Professional Studies	
7.	ISIT20	Object	-oriented P	rogramming Platforms			vare and Information Technologies (Inđija), luate Professional Studies	
8.	ISIT2A	Softwa	are Develop	ment Techniques		, ,	vare and Information Technologies (Inđija), luate Professional Studies	
9.	SE0006	Ohiect	oriented or	ogramming 1			tware Engineering and Information Technologies, luate Academic Studies	
J.	020000	Object	. onemeu pi	ogramming i		Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies	
10.	SE0014	Compi	uter organis			Undergrad	tware Engineering and Information Technologies, luate Academic Studies	
10.	020014	4 Computer organisation					tware Engineering and Information Technologies - Indergraduate Academic Studies	



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
11.	SE0017	Software Development Metrodologies	( P00) Production Engineering, Undergraduate Academic Studies ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies ( SEL) Software Engineering and Information Technologies -				
12.	SE0024	Software Construction and Testing	Loznica, Undergraduate Academic Studies  ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies  ( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
13.	SES103	Oral and written communication skills	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies     ( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
14.	E2501	Electronic Payment Systems	( E20) Computing and Control Engineering, Master Academic Studies ( SE0) Software Engineering and Information Technologies, Master Academic Studies				
15.	EP007	Document and content management	( I20) Engineering Management, Specialised Professional Studies ( IB0) Engineering Management - MBA, Specialised Professional Studies				
16.	E2522	Software Standardization and Quality	(E20) Computing and Control Engineering, Master Academic Studies  (MR0) Measurement and Control Engineering, Master Academic Studies  (SE0) Software Engineering and Information Technologies, Master Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
17.	SEM009	Identity Management	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
18.	SEM013	E-government technologies	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
19.	SEM017	Information Security	( SE0) Software Engineering and Information Technologies, Master Academic Studies				
20.	DRNI03	Selected Topics in Internet-Based Systems	( E20) Computing and Control Engineering, Doctoral Academic Studies				
21.	DRNI16	Selected Topics in Electronic Business	( E20) Computing and Control Engineering, Doctoral Academic Studies ( OM1) Mathematics in Engineering, Doctoral Academic Studies				
22.	DRNI19	Selected Topics in Information Security	( E20) Computing and Control Engineering, Doctoral Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more than 10)					
1.		, Milosavljević B., Surla D., Konjović Z.: Flexible Access Co l. 30, No 5, pp. 623-652, ISSN 0264-0473, DOI:10.1108/02	ontrol Framework for MARC Records, The Electronic Library, 640471211275684				
2.	Organiza	S., Sladić G., Milosavljević B., Konjović Z.: Context-sensitivitional Computing and Electronic Commerce, 2012, Vol. 22, 080/10919392.2012.667717	ve Access Control Model for Government Services, Journal of No 2, pp. 184-213, ISSN 1091-9392,				
3.		, Milosavljević B., Konjović Z., Vidaković M.: Access Contro and Information Systems (ComSIS), 2011, Vol. 8, No 3, pp.	ol Framework for XML Document Collections, Computer 591-609, ISSN 1820-0214, DOI: 10.2298/CSIS100827002S				
4.	Vidaković M., Milosavljević B., Konjović Z., Sladić G.: Extensible Java EE-Based Agent Framework and Its Application on						
5.		, Milosavljević B., Konjović Z.: Extensible Access Control N ce on Security and Cryptology - SECRYPT, Barcelona: INS	Model for XML Document Collections, 1. International STICC, 28-31 Jul, 2007, pp. 373-380, ISBN 9789898111128				
6.	Sladić G.	: Kontrola pristupa u poslovnim sistemima, Beograd, Zadu	žbina Andrejević, 2011, ISBN 978-86-525-0000-0				
7.	Sladić G.	: Kontrola pristupa XML dokumentima, Zadužbina Andreje	vić, 2008, ISBN 978-86-7244-683-8				

# TAS STUDIO S

Current projects

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering

International:



0

# Representative refferences (minimum 5, not more than 10) 8. Vidaković M., Sladić G., Komazec S.: Sistemi za upravljanje elektronskim sadržajima i njihova primena u e-upravi, InfoM, Časopis za informacionu tehnologiju i multimedijalne sisteme, 2006, No 20, pp. 36-41, ISSN 1451-4397 9. Sladić G., Milosavljević B., Konjović Z.: Kontrola pristupa XML dokumentima, Info-M, 2005, Vol. 4, No 15-16, pp. 53-59 10. Milosavljević B., Komazec S., Sladić G.: Open source sistemi za upravljanje dokumentima u e-upravi, Info-M, 2006, Vol. 5, No 20, pp. 25-35 Summary data for teacher's scientific or art and professional activity: Quotation total: 54 Total of SCI(SSCI) list papers: 4

2

Domestic:

# THE STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

			Sladoje Matić I. Nataša						
			Associate Professor						
			Faculty of Technical Sciences - Novi Sad						
					14.03.1994				
					Mathematics				
Acad	demic caries	er	Year	Institution			Field		
Acad	demic title e	ection:	2011				Mathematics		
PhD	thesis		2005	University of Novi Sad -	Novi Sad		Mathematical Sciences		
Magi	ister thesis		1998	Faculty of Sciences - No	ovi Sad		Mathematical Sciences		
Bach	nelor's thesis	3	1992	Faculty of Sciences - No	ovi Sad		Mathematical Sciences		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
1.	A101	Mathe	matics			( A00) Arch	nitecture, Undergraduate Academic Studies		
2.	E135B	Mathe	matical Ana	llysis 2		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic		
3.	GI107	Mathe	matical Ana	llysis 1		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic		
4.	IAM001	Mathe	matical Sha	pe Modeling for Compute	er Animation	( F10) Eng Studies	ineering Animation, Undergraduate Academic		
5.	IAM004	Geom	etry of Disci	rete Space		( F10) Eng Studies	ineering Animation, Undergraduate Academic		
6.	IGA008	Mathe	matics for E	Ingineering Graphics		( F10) Eng Studies	10) Engineering Animation, Undergraduate Academic udies		
7.	BMI91	Mathematics 1				( BM0) Biomedical Engineering, Undergraduate Academic Studies			
8.	BMI92	Mathe	matics 2			( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
9.	E101A	Discre	te Mathema	atics		( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
							ver, Electronic and Telecommunication g, Specialised Academic Studies		
						( I12) Indus	strial Engineering, Specialised Academic Studies		
10.	DZ01MS	Selected Chapters in Mathematics				( I22) Engineering Management, Specialised Academic Studies			
						( Z00) Envi	ironmental Engineering, Specialised Academic		
11.	Z506	20BAd	Ivanced Co	urse in Mathematics 1		( ZP1) Disa Academic	aster Risk Management and Fire Safety, Master Studies		
						(Z20) Envi	ronmental Engineering, Master Academic Studies		
12.	IA018	Comp	uter Geome	try		( F20) Eng	ineering Animation, Master Academic Studies		
13.	D0M28	Digital	Geometry			( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		
14.	D0M29	Image	Processing	1		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		
15.	D0M30	Image Processing 2			( OM1) Ma Studies	thematics in Engineering, Doctoral Academic			
16.	D0M31	Applied Algorithms				( OM1) Mathematics in Engineering, Doctoral Academic Studies			
17.	D0M32	Combi	natorial and	I Geometric Algorithms		( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		
18.	D0M33	Positio	onal Games			( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes							
	ID	Course name		Study programi	me name, study type			
					ectronic and Telecommunic ctoral Academic Studies	ation		
				(E20) Computin Academic Studie	g and Control Engineering, les	Doctoral		
				( F00) Graphic E Studies	ingineering and Design, Doo	ctoral Academic		
				(F20) Engineeri	ng Animation, Doctoral Acad	demic Studies		
				(G00) Civil Engi	neering, Doctoral Academic	Studies		
				(GI0) Geodesy	and Geomatics, Doctoral Ac	ademic Studies		
10	D704M	Salastad Chantons in Mathematics		( H00) Mechatro	nics, Doctoral Academic Stu	ıdies		
19.	DZ01M	Selected Chapters in Mathematics		( I20) Industrial E Doctoral Acaden	Engineering / Engineering M nic Studies	anagement,		
				( M00) Mechanic	cal Engineering, Doctoral Ac	ademic Studies		
				( M40) Technica	l Mechanics, Doctoral Acade	emic Studies		
				( OM1) Mathema Studies	atics in Engineering, Doctora	al Academic		
				( S00) Traffic Engineering, Doctoral Academic Studio				
			( Z00) Environmental Engineering, Doctoral Acad Studies			Academic		
				(Z01) Safety at	Work, Doctoral Academic St	tudies		
20.	AID07	Digital geometry		(F20) Engineeri	ng Animation, Doctoral Acad	demic Studies		
Rep	presentative	e refferences (minimum 5, not more th	an 10)					
1.		N., Lindblad J., Nystrom I.: Defuzzificang, 2011, Vol. 29, No 2-3, pp. 127-141		ets by feature dist	ance minimization., Image	and Vision		
2.		Lindblad J., Sladoje N.: Regularized I. 27, No 8, pp. 8501-1, ISSN 0266-56		ed on Spectral Gra	adient Optimization, Inverse	Problems,		
3.		N., Lindblad J.: High precision bound Analysis and Machine Intelligence, 200				ansactions on		
4.		ie and J. Lindblad, "Representation a . 517-534, 2007.<\eng>	nd Reconstruction of F	uzzy Disks by Mo	oments", Fuzzy Sets and Sy	stems, Vol. 158,		
5.		ie, I. Nyström, and P.K. Saha, "Measu ng, vol. 23, pp 123-132, 2005.<\eng>	rements of digitized of	pjects with fuzzy b	porders in 2D and 3D", Imag	e and Vision		
6.		and N. Sladoje, "Efficiency of Characthine Intelligence, vol.22, No.4, pp 407		Ilipsoids by Discr	ete Moments", IEEE Trans.	Pattern Analysis		
7.		ssot, I. Nyström and N. Sladoje, "Sha Recognition Letters, vol. 26(6), pp. 735		star-shaped sets	based on distance from the	centroid",		
8.		, Lindblad, J., Sladoje, N., Sarve, H., I for Pattern Analysis and Applications		set distance and i	ts application to shape regis	tration.		
9.		L., Sladoje N. Coverage Segmentatio s. Pattern Recognition Letters, Vol. 3			ization of Perimeter and Bou	ındary		
10.		g F., Lindblad J., Sladoje N., Nystrom er Science, 2011, Vol. 412, No 15, pp.		nework for sub-pi	xel image segmentation, Th	eoretical		
Sur	mmary data	for teacher's scientific or art and profe	essional activity:					
	tation total:		71					
Tota	of SCI(SS	CI) list papers :	21	-				
Curre	ent projects	1	Domestic :	2	International:	3		

# DE JC

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:					Slankamenac P. Miloš				
Academic title:			Assistant Professor						
Name of the institution where the teacher works full time and					Faculty of Te	Faculty of Technical Sciences - Novi Sad			
					01.02.2002				
Scie	ntific or art f	ield:		Î	Electronics				
Acad	lemic carie	er	Year	Institution			Field		
Acad	lemic title e	lection:	2011	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
PhD	thesis		2010	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
Magi	ster thesis		2004	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
Bach	elor's thesi	s	2001	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
List	of courses b	eing he	ld by the te	acher in the accredited sto	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	EM414	Optoe	lectronics				er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	F207	Electro	onics and O	ptoelectronics		( F00) Gra Academic	phic Engineering and Design, Undergraduate Studies		
3.	EM430A	Contro	and proce	ess electronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	EM444B	Applie	d electronic	es			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
5.	EM455	Electro	onic multime	edia systems			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
6.	EM456	Comp	uters in the	supervisory and control s	ystems	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
7.	ETI02	Electronics and Telecommunication Develo			pment Tools	( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
8.	ETI09	Electronics				( E02) Elec Profession	E02) Electronics and Telecommunications, Undergraduate rofessional Studies		
9.	ETI14	Digital Electronics					2) Electronics and Telecommunications, Undergraduate ressional Studies		
10.	ETI22	Senso	rs and Actu	ators		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
11.	ETI28	Indust	rial Electror	nics		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
12.	ETI38	Optoe	lectronics fo	or communication and ser	nsors	( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
13.	DE201S	Select	ed Chapter	s in Optoelectronics and F	Photonics	1	ver, Electronic and Telecommunication g, Specialised Academic Studies		
14.	DE503S	Indust	rial Electror	nics			ver, Electronic and Telecommunication g, Specialised Academic Studies		
15.	SI013	Applie	d electronic	es in industry			ver, Electronic and Telecommunication g, Specialised Professional Studies		
16.	SI035	Electro	onic System	ns in Oil Industry			ver, Electronic and Telecommunication g, Specialised Professional Studies		
17.	SI042	Optoe	lectronics c	omponents		( E00) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies		
18.	BMIM1A	Applic	ations of las	sers in medicine		1	medical Engineering, Master Academic Studies		
19.	DE117S	Select	ed chapters	s from optoelectronics sen	sors systems		ver, Electronic and Telecommunication g, Specialised Academic Studies		
20.	DE315S	Optoe	lectronics s	ensors systems-advanced	d course		ver, Electronic and Telecommunication g, Specialised Academic Studies		
21.	DE418S	Design	of comple	x optoelectronics systems	3	(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
22.	EM435A	Electro	onic System	ns in Oil Industry			er, Electronic and Telecommunication g, Master Academic Studies		
23.	EM437A	The application of electronic systems in clear			an and		er, Electronic and Telecommunication g, Master Academic Studies		

# LANAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



					Engineering			
List	of courses b	peing held by the teacher in the accred	dited study programme	es				
	ID	Course name Study programme name, study type						
24.	EM439A	Electronics in veichles		(E10) Power, Ele Engineering, Ma	ation			
25.	EM520	Industrial networks and protocols			ectronic and Telecommunica ster Academic Studies	ation		
26.	EM521	Applied optoelectronics			ectronic and Telecommunica ster Academic Studies	ation		
27.	EM523	Applied electronics in industry		, , ,	ectronic and Telecommunica ster Academic Studies	ation		
28.	EM532	Design of electronic devices.			ectronic and Telecommunica ster Academic Studies	ation		
29.	F510E1	Electronic multimedia systems		( F00) Graphic E Studies	ingineering and Design, Mas	ster Academic		
30.	DE201	Selected Chapters in Optoelectronic	s and Photonics		ectronic and Telecommunic ctoral Academic Studies	ation		
31.	DE400	Complex Digital Systems and High F	Frequency Circuits		ectronic and Telecommunic ctoral Academic Studies	ation		
32.	DE503	Industrial Electronics			ectronic and Telecommunic ctoral Academic Studies	ation		
				( M40) Technical Mechanics, Doctoral Academic Studies				
33.	DE117	Selected chapters from optoelectron	ics sensors systems		ectronic and Telecommunic ctoral Academic Studies	ation		
34.	DE315	Optoelectronics sensors systems-ac	Ivanced course		ectronic and Telecommunic ctoral Academic Studies	ation		
35.	DE418	Design of complex optoelectronics s	ystems		ectronic and Telecommunic ctoral Academic Studies	ation		
Rep	presentative	e refferences (minimum 5, not more th	an 10)					
1.		Slankamenac, Miloš B. Živanov, Nikol adu, 281 str., 2010.	a Stojanović "Optoele	ktronske kompone	ente -skripta", Fakultet tehni	čkih nauka u		
2.		ınkamenac, Kalman Babković, Ivan M Novom Sadu, Edicija: Tehničke nauke				kultet tehničkih		
3.	Miloš B. 2 Sadu, Ed	Živanov, Miloš P. Slankamenac, Opto licija: Univerzitetski udžbenik, 110 str.	elektronika, praktikum ISBN: 978-86-7892-0	za laboratorijske 85-1, UDK: 621.3	vežbe, Fakultet tehničkih na 8:535(075.8)(076), Novi Sad	luka u Novom d, 2008.		
4.		enac M., Lukić-Petrović S., Živanov M tion dependence and topological effec						
5.		Stupar D., Manojlović L., Slankamena ators A: Physical, 2012, Vol. 185, pp.			gh-sensitivity fiber-optic tilt s	sensor, Sensors		
6.	Stuper D. Rajić I. Manojlović I. Slankamanac M. Joža A. Živanov M.: A. Wearable Low-Cost System for Human Joint							
7.		ić L., Živanov M., Slankamenac M., B. cked low-coherence interferometry, Al				asurement with		
8.	Lukić-Petrović S., Skuban F., Petrović D., Slankamenac M.: Effect of copper on DC and AC conductivity of (As2Se3)(Asl3) glassy							
9.		enac M., Lukić-Petrović S., Živanov M Se1.4l0.2)90, Semicond. Sci. Technol						
10.	Bajić J., Stupar D., Joža A., Slankamenac M., Jelić M., Živanov M.: A simple fiber optic inclination sensor based on the refraction of light, Physica scripta, 2012, Vol. 149, pp. 1-4, ISSN 0031-8949, UDK: doi:10.1088/0031-8949/2012/T149/014024							
Sur	mmary data	for teacher's scientific or art and profe	essional activity:					
Quot	tation total :		26					
Total	of SCI(SS	CI) list papers :	18					
Curre	ent projects	1	Domestic :	3	International :	2		

# FACULT

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Science, arts and professional qualifications

Name and last name:						Sovilj M. Platon			
Academic title:					Assistant Professor				
Name of the institution where the teacher works full time and F					Faculty of Technical Sciences - Novi Sad				
starting date: 01.1					01.10.2007	,			
Scier	ntific or art f	ield:			Electrical Mea	asurements			
Acad	lemic carie	er	Year	Institution			Field		
Acad	lemic title e	lection:	2011	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
PhD	thesis		2011	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering		
Magi	ster thesis		2006	Faculty of Technical Sci	ences - Novi S	ad	Biomedical Engineering		
Bach	elor's thesi	S	1997	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	BM119E	Techn and sy		ds and regulations for me	dical devices	( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
2.	BMI115	Biome	dical Engin	eering in Cognitive Neuro	science	( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
3.	EI408	Projec	t Managem	ent			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	EIDMS1		orocessor ba	ased measurement and d	ata	Ùndergrad	easurement and Control Engineering, luate Academic Studies		
		acquis	Sition system	10 1		Èngineerin	er, Electronic and Telecommunication  g, Undergraduate Academic Studies		
5.	EIDMS2		processor ba	ased measurement and da	ata	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
		acquis	milori system	13.2		Èngineerin	er, Electronic and Telecommunication  g, Undergraduate Academic Studies		
						( BM0) Biomedical Engineering, Undergraduate Academic Studies			
6.	EIMMB M		ds of measins in biome	urement and measuremer dicine	nt-acquisition	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
							er, Electronic and Telecommunication g, Undergraduate Academic Studies		
7.	EIPDMS	Progra Syster		Measurement and Data Ac	equisition	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
8.	EIVI	Virtual	measurem	ent systems			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	EIWDS	Weh-h	ased Meas	urement and Data Acquis	ition Systems		asurement and Control Engineering, uate Academic Studies		
				aromoni ana Bata / toquio			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
10.	BMIM5A			ent instrumentation in bior		( BM0) Biomedical Engineering, Master Academic Studies			
11.	ВМІМ5В	Desigr systen		opment of medical device	s and	( BM0) Bio	medical Engineering, Master Academic Studies		
12.	BMIM5C		Computer Ir	nterface		(BM0) Bio	medical Engineering, Master Academic Studies		
13.	BMIM5D			nce Devices in Biomedicii		(BM0) Bio	medical Engineering, Master Academic Studies		
14.	BMIM5E	Distrib biome		rement and acquisition sy	ystems in	( BM0) Bio	medical Engineering, Master Academic Studies		
15.	EIIKL	_		munication, logistics and ir	ntellectual	Academic			
		property				Èngineerin	er, Electronic and Telecommunication  g, Master Academic Studies		
16.	EIMRV1	Real T	ime Measu	rements		Academic			
						er, Electronic and Telecommunication g, Master Academic Studies			

# TAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study program	me name, study type				
17.	DE303	Biomedical Instrumentation		Engineering, Do	lectronic and Telecommunic ctoral Academic Studies				
				( M40) Technical Mechanics, Doctoral Academic Studies					
18.	DE417	Web-based Measurement Systems	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			ation			
19.	DE518 Brain Computer Interface Systems (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies								
Rep	presentative	e refferences (minimum 5, not more th	an 10)						
1.	Sovilj P.:	Stohastičko digitalno merenje EEG s	ignala, Novi Sad, Fakı	ultet tehničkih nau	uka, 2010				
2.	Sovilj P.:	Eksterno testiranje površinskih kalem	ova uređaja za magne	etsku rezonancu,	FTN Novi Sad, 2006				
3.	3. Sovilj P., Milovančev S., Vujičić V.: Digital Stochastic Measurement of a Nonstationary Signal With an Example of EEG Signal Measurement, IEEE Transactions on Instrumentation and Measurement, 2011, Vol. 60, No 9, pp. 3230-3232, ISSN 0018-9456								
4.	Sovilj P., Pjevalica N.: FPGA based model of processing EEG signal, 17. Telekomunikacioni forum TELFOR, Beograd: Telecommunications society, Belgrade, 24-26 Novembar, 2009, pp. 677-680, ISBN 978-86-7466-375-2								
5.	Accompli	Čabrilo N., Vujičić V., Župunski I.: Reshments in Electrical and Mechanical ka, 26-28 Maj, 2011, pp. 885-891, ISE	Engineering and Infor	mation Technolog	gy - DEMI, Banja Luka: Maši				
6.		Davidović D., Beljić Ž., Ković V.: Mea unikacioni forum TELFOR, Beograd: 1							
7.		N., Pjevalica V., Sovilj P.: Tehničko i kog razvoja TR-11005, 2011	ešenje: Unapređeni a	lgoritam upravljar	nja memorijom, Razvijeno: u	okviru projekta			
8.	Ivanović Manager	M., Sovilj P.: Developing Expert Systonent	em for assessment of	quality managem	ent level, International Journ	al Total Quality			
9.	M. Bobre	k, Z. Tanasić, P. Sovilj: Upravljanje pr	ojektima, udžbenik, M	FBL, Banja Luka,	2006				
10.	M. Bobre	k, M. Soković, P. Sovilj, Z. Tanasić: U	pravljanje kvalitetom,	udžbenik, MFBL,	Banaj Luka 2006, COBISS.	SI-ID 982249			
Sur	mmary data	for teacher's scientific or art and profe	essional activity:						
Quot	tation total :		5						
Tota	of SCI(SS	CI) list papers :	1						
Curre	rrent projects : Domestic : 2 International : 1								



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation



Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:			Spasić T. Dragan						
	lemic title:	anio.			Full Professo	·			
		titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad				
_	ng date:				01.09.1985				
Scier	ntific or art f	ield:			Mechanics				
Acad	lemic carie	er	Year	Institution	Field		Field		
Acad	lemic title e	lection:	2005	Faculty of Technical Sci	ences - Novi S	ad	Mechanics		
PhD	thesis		1993	Faculty of Technical Sci	ences - Novi S	ad	Mechanics		
Magi	ster thesis		1991	Faculty of Mathematics	- Beograd		Mechanics		
Bach	elor's thesi	S	1884	Faculty of Technical Sci	ences - Novi S	ad	Information-Communication Systems		
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
						( A00) Arch	nitecture, Undergraduate Academic Studies		
1.	A207	Mecha	nics			( F10) Eng Studies	ineering Animation, Undergraduate Academic		
						( H00) Med	chatronics, Undergraduate Academic Studies		
2.	H112	Mecha	nics 1 – Fu	ndamentals		( S00) Traf Academic	fic and Transport Engineering, Undergraduate Studies		
3.	H201	Mecha	nics 2 - Ge	neral		( H00) Med	chatronics, Undergraduate Academic Studies		
4.	H303	Mecha	itronics 3 –	Further Chapters		( H00) Med	chatronics, Undergraduate Academic Studies		
						( F10) Eng Studies	ineering Animation, Undergraduate Academic		
5.	1600	Industrial Robotics				( MR0) Measurement and Control Engineering, Undergraduate Academic Studies			
							er, Electronic and Telecommunication g, Undergraduate Academic Studies		
6.	M4302	Biomechanics and mechanics of sport					chnical Mechanics and Technical Design, uate Academic Studies		
7.	ASO	Introdu	uction to en	gineering			enic Architecture, Technique and Design, duate Academic Studies		
8.	BMI127	Biome	chanics			Studies	medical Engineering, Undergraduate Academic		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	BMI128	Contin	uum Biome	chanics		Studies	medical Engineering, Undergraduate Academic		
10.	BMI96	Mecha	nics			Studies	medical Engineering, Undergraduate Academic		
11.	II1004	Mecha	nics and In	dustrial Engineering		Studies	strial Engineering, Undergraduate Academic		
12.	M44041	Dynan	nics of non-	smooth mechanical system	ms	Ùndergrad	chnical Mechanics and Technical Design, uate Academic Studies		
13.	M44061			echanical systems		Undergrad	hnical Mechanics and Technical Design, uate Academic Studies		
14.	BMIM4A	Transp	ort phenon	nena and Living systems		(BM0) Bio	medical Engineering, Master Academic Studies		
15.	M45991	Biome	chanics of o	cardiovascular system		( M40) Tec Academic	hnical Mechanics and Technical Design, Master Studies		
16.	SZD051		ations of op nment prote	timal control theory in livir	ng	( Z00) Envi	ironmental Engineering, Specialised Academic		
						( H00) Med	chatronics, Doctoral Academic Studies		
						( M00) Med	chanical Engineering, Doctoral Academic Studies		
17.	DM406	Nonsn	nooth Mech	anics and Optimization		( M40) Tec	hnical Mechanics, Doctoral Academic Studies		
						( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		
18.	DZ003	Selected Chapters in Mechanics				( M00) Med	chanical Engineering, Doctoral Academic Studies		

# STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programm	me name, study type				
19.	ZD051	Applications of optimal control theorems environment protection	y in living	( Z00) Environme Studies	ental Engineering, Doctoral	Academic			
20.	DM801	Biomedical mechanics (M40) Technical Mechanics, Doctoral Academic Studies							
21.	DTM02	Theory of impact		( M00) Mechanic ( M40) Technical	nics, Doctoral Academic Stucal Engineering, Doctoral Acade I Mechanics, Doctoral Acade gineering, Doctoral Academ	eademic Studies emic Studies			
22.	DTM03	Biomechanical models and analysis	of impact	( M40) Technical	Mechanics, Doctoral Acade	emic Studies			
23.	ZRD16A	Selected chapters in mechanics and	elasticity theory	( Z01) Safety at \	Work, Doctoral Academic S	tudies			
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.	Spasić D., Glavardanov V.: Does generalized elastica lead to bimodal optimal solutions?, International Journal of Solids and Structures, 2009, Vol. 46, No 14-15, pp. 2939-2949, ISSN 0020-7683								
2.	2. Grahovac N., Žigić M., Spasić D.: On impact scripts with both fractional and dry friction type of dissipation, INT J BIFURCAT CHAOS, 2012, No Prihvaćen za štampu, ISSN 0218-1274								
3.	3. D. T. Spasic and T. M. Atanackovic (2004), "Bimodal optimization of a compressed rotating rod", Acta Mechanica, 173, N 1-4, 77-87								
4.		.: Optimizing the elctrodynamical stat No 9, pp. 112-121, ISSN 0005-1179	pilization method for a	man-made Earth	satellite, AUTOMAT REM C	ONTR , 2011,			
5.		Lj., Spasić D., Atanacković T.: On a i ISSN 0109-5641	mathematical model of	f a human root de	ntin , Dental Materials, 200	05, Vol. 21, pp.			
6.		Spasić D.: Clinical Characteristic and GYNECOL OBSTET INVES, 2011, Vo				omboembolic			
7.		nackovic and D. T. Spasic, (2004): "C lechanics, 71, 134-138	n viscoelastic complia	nt contact-impact	models", Transactions of A	SME Journal of			
8.	opportun	R., Spasic D.T., Karadzic B., Novakov ities for the city of Novi Sad"", Coordir nograph 157 pages in English and Se	nated by T. Atanackovi						
9.	Spasić D knjiga, 20	.: Boudary elements, theory and appl 011	ications (English to se	rbian traslation do	one by D.T. Spasić), Beogra	d, Gradjevinska			
10.	BD Vujar 1997.	nović, DT Spasić: Metodi optimizacije:	primenjeni varijacioni	račun, analitička r	mehanika, optimalno upravlj	janje, UNS,			
Sur	nmary data	for teacher's scientific or art and profe	essional activity:						
	ation total:		16						
Total	of SCI(SS	CI) list papers :	8			,			
Current projects: Domestic: 1 International: 0					0				



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	Name and last name: Spasić-				Spasić-Jokić	asić-Jokić M. Vesna		
	lemic title:				Full Professor			
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Te	chnical Scie	nces - Novi Sad	
starti	ng date:				01.12.2006			
Scie	ntific or art f	ield:			Electrical Mea	asurements		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	ection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements	
PhD	thesis		1994	School of Electrical Eng	ineering - Beog	grad	Electrical Measurements	
Magi	ster thesis		1986	School of Electrical Eng	ineering - Beog	grad	Electrical Measurements	
Bach	elor's thesi	3	1978	School of Electrical Eng	ineering - Beog	grad	Electrical Measurements	
List of courses being held by the teacher in the accredited study programmes								
	ID	Course	e name			Study pro	ogramme name, study type	
1.	El410	Biophy	/sics				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EIJNZZ	lonizin	a and Non-	Ionizing Radiation and Pr	otection	( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
	LIVINZZ	IOIIIZIII	9 4114 14011-	Total Tudal dilott dilott in		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EIMET	Metrol	ogy			Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EISIK	Standa	ardization a	nd quality		Undergrad	easurement and Control Engineering, luate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication  g, Undergraduate Academic Studies	
5.	DE303S	Biomedical Instrumentation				Engineerin	ver, Electronic and Telecommunication ng, Specialised Academic Studies	
6.	El522	Introduction to knowledge management				Engineerin	er, Electronic and Telecommunication g, Master Academic Studies	
7.	SI018	Ionizin	g and Non-	Ionizing Radiation and Pr	otection	Èngineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies	
8.	SI019	Quality	/ in Biomed	icine		Engineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies	
9.	SI039	Metrol	ogy				ver, Electronic and Telecommunication g, Specialised Professional Studies	
10.	EIIKL			nunication, logistics and in	ntellectual	( MR0) Me Academic	asurement and Control Engineering, Master Studies	
		proper	ty			' '	er, Electronic and Telecommunication g, Master Academic Studies	
11.	DE303	Biome	dical Instru	mentation		Èngineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
						( M40) Tec	chnical Mechanics, Doctoral Academic Studies	
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	M.Tomaš	ević, V.	Spasić Joki	ć: "Rendgensko zračenje	i zaštita u man	nografiji", izd	davač Srpsko lekarsko društvo, 2002, 348 strana.	
2.				Jokić. Petar Beličev, Milo metry using CT data", Phy			arlo SRNA-VOX code for 3D proton dose 011–1017.	
3.	Technolo	gies: Ne	ew Develop		nologies, I-Tec		itoring In Serbia, chapter 10 In: Environmental and Publishing, ARS Journal Vienna, ISBN 978-	
4.	Humanity	Issues	in the Dow	n Danubian Region: Multi-	disciplinary App	oroach. Ed.[	Chapter 2 In: Environmental, Health and Dragutin Mihailovic, Mirjana Vojinovic Miloradov, 3 i 978-981-283-439-7, strane 15-24, ukupno 392	
5.	D. Popovic, D. Todorovic, V. Spasic Jokic, J. Nikolic and J. Ajtic, Contents of Radionuclides in Soils in Serbia: Dose Calculations							
6.	V. Spasio	Jokic.	Health Risk	•	ose Ionizing Ra	adiation, In: I	Risk Assessment and Management, Ed. Zhang	

# ALESTAS STUDIOS

## UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



	Engineering							
Rep	Representative refferences (minimum 5, not more than 10)							
7.	D.Popović, T.Božić, J.Stevanović. M.Frontasyeva, D.Todorovic, V.Spasić Jokić. (2010) Concentration of trace elements in blood and feed of homebred animals in Southern Serbia. Environmental Science and Pollution Research, Vol 17 (5), ISSN 0944-1344, strane 1119-1128							
8.	A.Milatovic, O. Ciraj Bjelac, S. Ivanovic, S. Jovanovic, V.Spasic Jokic, Patient dose measurements in diagnostic radiology procedures in Montenegro, Radiation Protection Dosimetry, Radiation Protection Dosimetry, 149 (4):454-463. (2012)							
9.	Župunski Lj., Spasić Jokić V., Trobok M., Gordanić V.: Cancer Risk Assessment after Exposure From Natural Radionuclides In Soil Using Monte Carlo Techniques DOI: 10.1007/s11356-010-0344-9, Environmental Science and Pollution Research, 2010, Vol. 17, No 9, pp. 1574-1580, ISSN 0944-1344							
10.	Spasić Jokić V., Župunski Lj., Janković Lj., Gordanić V.: Effective dose estimation and lifetime cancer mortality risk assessment from exposure to Chernobyl 137Cs on the territory of Belgrade City and the region of Vojvodina, Serbia, Environmental Science and Pollution Research, 2011, Vol. 18, pp. 708-715, ISSN 0944-1344							
Sur	mmary data for teacher's scientific or art and prof	essional activity:						
Quot	ration total :	23						
Total	of SCI(SSCI) list papers :	13						
Curre	ent projects :	Domestic :	1	International :	1			

# STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	e and last n	ame:			Stankovski V. Stevan			
$\vdash$	lemic title:				Full Professor			
		titution v	vhere the te	eacher works full time and		Faculty of Technical Sciences - Novi Sad		
	ng date:				23.03.1987			
Scie	ntific or art f	ield:			Mechatronics	, Robotics a	and Automation and Integral Systems	
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2005	Faculty of Technical Sci	ences - Novi S	ad	Mechatronics, Robotics and Automation and Integral Systems	
PhD	thesis		1994	School of Electrical Engi	ineering - Beog	grad	Electrical and Computer Engineering	
Magi	ster thesis		1991	School of Electrical Engi	ineering - Beog	grad	Electrical and Computer Engineering	
Bach	elor's thesi	S	1987	Faculty of Technical Sci	ences - Novi S	ad	Electrical and Computer Engineering	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course name			Study programme name, study type			
1.	H105	Funda	mentals in	Computer science		( H00) Med	chatronics, Undergraduate Academic Studies	
2.	H109	Funda	mentals in l	Programming		( H00) Med	chatronics, Undergraduate Academic Studies	
3.	H1403	Autom	ation of wo	rk processes		1	chatronics, Undergraduate Academic Studies	
4.	H1409	Intellig	ent System	is		( H00) Med	chatronics, Undergraduate Academic Studies	
5.	H1410			l application of programma	able logic	( H00) Med	chatronics, Undergraduate Academic Studies	
6.	H1501A	contro		ailance and Visualisation o	of Droope	( H00) Mag	photronica Undergraduate Academia Studios	
7.	H310				JI FIOCESS	<u> </u>	chatronics, Undergraduate Academic Studies	
<b>.</b>	пэто	Compo	onenis or le	chnological systems		<del></del>	chatronics, Undergraduate Academic Studies chatronics, Undergraduate Academic Studies	
8.	H311	Application of Sensors and Actuators				(E10) Pow	er, Electronic and Telecommunication  g, Undergraduate Academic Studies	
9.	BM116C	Motion control					medical Engineering, Undergraduate Academic	
10.	BMI106	Rehabilitation devices and systems				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
11.	BMI110	Sensors and actuators in medicine				( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
12.	II1009	Autom	atic identific	cation systems		( I10) Indus Studies	strial Engineering, Undergraduate Academic	
13.	II1010	Contro	ol of technic	al systems		( I10) Indus Studies	strial Engineering, Undergraduate Academic	
14.	II1011	Autom	ation of wo	rk processes 1		Studies	strial Engineering, Undergraduate Academic	
15.	II1015	Progra	ammable Lo	ogic Controllers (PLC)		( I10) Indus Studies	strial Engineering, Undergraduate Academic	
16.	II1038	Autom	ation of wo	rk processes 2		( I10) Indus Studies	strial Engineering, Undergraduate Academic	
17.	II1042	Autom	ation of Co	ntinual Processes		Studies	strial Engineering, Undergraduate Academic	
18.	II1045	Syster	ms for meas	surement, surveillance and	d control	Studies	strial Engineering, Undergraduate Academic	
19.	II1048	Artificia	al intelligen	ce in engineering		Studies	strial Engineering, Undergraduate Academic	
20.	IM1022	Funda	mentals of	technical systems control		Studies ( M20) Med	neering Management, Undergraduate Academic chanization and Construction Engineering, luate Academic Studies	
21.	IM1035	Identifi	ication tech	nologies in enterprises		1	neering Management, Undergraduate Academic	
22.	IM1719	Implen	nentation of	f information systems in in	surance	(I20) Engir Studies	neering Management, Undergraduate Academic	
23.	H505	Implen	mentation of	f automated systems			chatronics, Master Academic Studies strial Engineering, Master Academic Studies	
						, ,		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



			Engineering
List	of courses b	eing held by the teacher in the accredited study programme	es I
	ID	Course name	Study programme name, study type
24.	HDOS12	Research in the area of automatic identification technology	( I12) Industrial Engineering, Specialised Academic Studies
25.	HDOS13	Motion control and application of MEMS	( I12) Industrial Engineering, Specialised Academic Studies
26.	HDOS14	Nonindustrial automation	( I12) Industrial Engineering, Specialised Academic Studies
27.	IMDR0S	Selected chapters in enterprise's design, organization	(112) Industrial Engineering, Specialised Academic Studies
21.	IIVIDRUS	and control	( I22) Engineering Management, Specialised Academic Studies
			(120) Engineering Management, Specialised Professional Studies
28.	MBA414	Integrated Business Processes	( IB0) Engineering Management - MBA, Specialised Professional Studies
29.	PLM09	Systems and Devices for Tracking Products Through Life Cycle	( I1U) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies
30.	NIT02	Factory Automation	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
31.	NIT06	Advanced Technologies for Manufacturing Support	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
32.	NIT08	Fundamentals of Computer Science and Informatics	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies
33.	GS006	Intelligent Buildings	( G10) Energy Efficiency in Buildings, Specialised Academic Studies
34.	H799	Fieldbuses and protocols	( H00) Mechatronics, Master Academic Studies
35.	H828	Advanced robotics	( H00) Mechatronics, Master Academic Studies
	110.45	<b>M</b> 6	( H00) Mechatronics, Master Academic Studies
36.	H845	Motion control	( I10) Industrial Engineering, Master Academic Studies
37.	1903	Application of microelectromechanical systems	( I10) Industrial Engineering, Master Academic Studies
38.	IIDS6	Selected chapters in automation	(I12) Industrial Engineering, Specialised Academic Studies
39.	IM2516	Artificial Intelligence in Engineering	(I20) Engineering Management, Master Academic Studies
40.	IM2716	Automation systems in insurance	(I20) Engineering Management, Master Academic Studies
41.	IM2721	Systems for detection, alarming and warning	(I20) Engineering Management, Master Academic Studies
42.	GD018	Automation and Robotics in Construction	( G00) Civil Engineering, Doctoral Academic Studies ( OM1) Mathematics in Engineering, Doctoral Academic Studies
43.	HDOK12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
44.	HDOK13	Motion control and the application of MEMS	( H00) Mechatronics, Doctoral Academic Studies
45.	HDOK14	Non-industrial Automation	( H00) Mechatronics, Doctoral Academic Studies
46.	HDOK-3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
47.	HDOKL3	Selected Chapters in Automation Systems Integration	( H00) Mechatronics, Doctoral Academic Studies
48.	HDOL12	Research in the area of automatic identification technologies	( H00) Mechatronics, Doctoral Academic Studies
49.	HDOL13	Motion controla and application of MEMS	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
50.	HDOL14	Nonindustrial automation	( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
51.	IMDR0	Science of Industrial Engineering and Management	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
52.	IMDR80	Selected chapters in automation	( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies
Ret	oresentative	e refferences (minimum 5, not more than 10)	

Representative refferences (minimum 5, not more than 10)

^{1.} Stankovski S., Tarjan L., Škrinjar D., Ostojić G., Šenk I.: Using a Didactic Manipulator in Mechatronics and Industrial Engineering Courses, IEEE Transactions on Education, 2010, Vol. 53, No 4, pp. 572-579, ISSN 0018-9359



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



_	Engineering						
Re	presentative refferences (minimum 5, not more th	an 10)					
2.	Gajić G., Stankovski S., Ostojić G., Tešić Z., M success factors – a case study in oil and gas ir 2012, ISSN 1751-7575						
3.	Stankovski S., Ostojić G., Šenk I., Rakić-Skoković M., Trivunović S., Kučević D.: Dairy cow monitoring by RFID, Scientia Agricola, 2012, Vol. 69, No 1, pp. 75-80, ISSN 0103-9016						
4.	Stankovski, S., Ostojić, G., Raković, M., Trajan, L., Šenk, I., Nikolić, M.: Zbirka rešenih zadataka iz: Programiranje i primena programabilno logičkih kontrolera, Fakulte tehničkih nauka, 2009						
5.	Stankovski, S., Rakić-Skoković, M., Šešlija, D.	, Ostojić, G.: Primena	RFID tehnologije	u automatizaciji			
6.	Stankovski S., Lazarević M., Ostojić G., Ćosić I., Purić R.: RFID Technology in Product/Part Tracking During the Whole Life Cycle , Assembly Automation, 2009, Vol. 29, No 4, pp. 364-370, ISSN 0144-5154						
7.	Ostojić G., Lazarević M., Stankovski S., Ćosić I.: RFID Technology Application in Disassembly Systems, Strojniski vestnik = Journal of Mechanical Engineering, 2008, Vol. 54, No 11, pp. 759-767, ISSN 0039-2480, UDK: 658.5						
8.	Popović B., Popović N., Mijić D., Stankovski S. Courses: A LabVIEW-based Implementation D ISSN 1061-3773						
9.	Stankovski S., Ostojić G., Tarjan L., Škrinjar D Science & Technology, 2011, Vol.35, No M1, p				n Journal of		
10.	Janković J., Petrović N., Miladinović Lj., Popkonstantinović B., Stoimenov M., Petrović D., Ostojić G., Stankovski S.: Computer  10. Simulation of Fast Hydraulic Actuators,Iranian Journal of Science & Technology, Transactions B, 2012, Vol. 36, No M1, pp. 95-  106, ISSN: 1028-6284						
Su	mmary data for teacher's scientific or art and profe	essional activity:					
Quo	tation total :	25					
Tota	l of SCI(SSCI) list papers :	20					
Current projects: Domestic: 3 International: 4							



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Stefanović D. Čedomir				
Acac	Academic title:			Assistant Professor					
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				22.06.2004				
	ntific or art f				Telecommunications and Signal Processing				
Acad	lemic caries	er	Year	Institution			Field		
<u> </u>	lemic title el	lection:	2012				Telecommunications and Signal Processing		
PhD	thesis		2011	Faculty of Technical Sci			Telecommunications and Signal Processing		
⊢– ŏ	ster thesis		2006	Faculty of Technical Sci			Telecommunications and Signal Processing		
	elor's thesis		2001	Faculty of Technical Sci			Telecommunications and Signal Processing		
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es			
	ID	Course name			Study pro	gramme name, study type			
1.	EK300	Digital	Modulation	ns .		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	SK300	Princip	oles of Digit	al Communications			tal Traffic and Telecommunications, uate Academic Studies		
3.	BM119B	Wirele	ss sensor r	etworks		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
4.	BMI102	Comm	unication S	ystems		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
5.	EK320	Princip	oles of digita	al communications			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
6.	EK453	SCAD	A Systems	Design			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
7.	EK459	Wireless sensor networks					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	ETI11	Communication systems				( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
9.	ETI33	Wirele	ss sensor n	etworks		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate nal Studies		
10.	S1328P	Princip	oles of digita	al modulations			stal Traffic and Telecommunications, duate Academic Studies		
11.	DE110S	Stocha	astic Proces	sses in Telecommunication	ns		ver, Electronic and Telecommunication g, Specialised Academic Studies		
12.	DE111S	Algorit	hms for Dig	ital Signal Processing			ver, Electronic and Telecommunication g, Specialised Academic Studies		
13.	DE512S	Humar	n-Machine \$	Speech Communication			ver, Electronic and Telecommunication g, Specialised Academic Studies		
14.	S0152	Next G	Seneration ⁻	Telecommunication Netwo	orks	( S01) Pos Academic	tal Traffic and Telecommunications, Master Studies		
15.	SI027	Advan	ced IP Com	nmunications			ver, Electronic and Telecommunication g, Specialised Professional Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					
1.	Stefanovi ad-hoc ne	ić Č., Vι etworks,	ukobratović , Ad Hoc Ne	D., Stanković V., Fantacc etworks, 2012, ISSN 1570	i R.: Packet-ce -8705	entric approa	ach for distributed sparse-graph coding in wireless		
2.	Stefanovi Streams,	ić Č., Ba IEEE T	ajić D.: On ransactions	the Search for a Sequence on Communications, 201	e from a Prede 2, Vol. 60, No	fined Set of 1, pp. 189-1	Sequences in Random and Framed Data 97, ISSN 0090-6778		
3.	Dissemin	ation Us	sing UEP R				rban Infrastructure-to-Vehicle Traffic Data Communications, 2011, Vol. 29, No 1, pp. 94-102,		
4.	Vukobratović D., Stefanović Č., Chiti F., Crnojević V., Fantacci R.: Rateless Packet Approach for Data Gathering in Wireless								
5.	Stefanović Č., Vukobratović D., Crnojević V., Stanković V.: A Random Linear Coding Scheme for Perimeter Data Gathering, 8.								



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)							
6.	Stefanović Č., Bajić D.: Acquisition Times of Contiguous and Distributed Marker Sequences: A Cross-Bifix Analysis, Lecture Notes in Computer Science, LNCS, 2010, pp. 55-66, 6. Sequences and Their Applications - SETA, Paris: Springer, 13-17 Septembar, 2010, pp. 55-66, ISBN 978-3-642-15873-5						
7.	Bajić D., Stefanović Č.: Statistical Analysis of Search for Set of Sequences in Random and Framed Data, Lecture Notes in Computer Science, LNCS, 2010, pp. 320-332, 6. Sequences and Their Applications - SETA, Paris: Springer, 13-17 Septembar, 2010, pp. 320-332, ISBN 978-3-642-15873-5						
8.	Vukobratović D., Stefanović Č., Stankovic V.: Fireworks: A Random Linear Coding Scheme for Distributed Storage in Wireless Sensor Networks, 2. IEEE Information Theory Workshop ITW, Dablin: IEEE, 30-3 Avgust, 2010, pp. 1-5, ISBN 978-1-4244-8262-, UDK: 10.1109/CIG.2010.5592800						
9.	Stefanović Č., Crnojević V., Vukobratović D., Niccolai L., Chiti F., Fantacci R.: Contaminated Area Monitoring via Distributed  Rateless Coding with Constrained Data Gathering, 6. ACM International Wireless Communications and Mobile Computing Conf. IWCMC, Caen: ACM, 5-8 Jul, 2010, pp. 671-675, ISBN 978-1-4503-0062-9/10						
10.	Stefanović Č., Vukobratović D., Karabenč T., Rovčanin M., Crnojević V.: On Energy Efficiency of Rateless Packet Scheme for Distributed Data Storage in Wireless Sensor Networks, 7. IEEE International Conference on Wireless On-Demand Systems and Services WONS, Kraniska Gora: IEEE, 3-5 Februar, 2010, pp. 61-65, ISBN 978-1-4244-6060-1						
Sun	nmary data for teacher's scientific or art and profe	essional activity:					
Quot	ation total :	57					
Total	of SCI(SSCI) list papers :	4	_	-			
Curre	ent projects :	Domestic :	2	International:	2		

Strana 395 Datum: 18.12.2012

# AS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:			Stojaković M. Mila					
_	lemic title:				Full Professor			
1		titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
-	ng date:				01.12.1975			
	ntific or art f				Mathematics			
	lemic carie		Year	Institution		Field		
	lemic title e	lection:	1993	Faculty of Technical Sci		ad	Mathematics	
	thesis		1980	Faculty of Sciences - No			Mathematical Sciences	
⊢– ŏ	ster thesis		1978	Faculty of Mathematics			Mathematical Sciences	
	elor's thesi		1975	Faculty of Sciences - No			Mathematical Sciences	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	S		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E121	Mathe	matical Ana	ılysis 2		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	E135	Probal	oility, Statis	tics and Stochastic Proces	sses	Undergrad	asurement and Control Engineering, uate Academic Studies	
			<b>,</b> ,			Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	E221A	Mathe	matical Ana	ılysis 2		Academic		
							asurement and Control Engineering, uate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
4.	E224A	Probability and Stochastic Processes				( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
	L22-7 (						tware Engineering and Information Technologies, uate Academic Studies	
			Loznica	( SEL) Soft Loznica, U	tware Engineering and Information Technologies - ndergraduate Academic Studies			
5.	ZC006	Probal	oility, Statis	tics and Random Process	es	( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
6.	0M504	Opera	tional Rese	arch		( OM1) Ma Studies	thematics in Engineering, Master Academic	
7.	0M505	Stocha	astic Proces	sses		( OM1) Ma Studies	thematics in Engineering, Master Academic	
8.	0ML504	Opera	tional Rese	arch		( OM1) Ma Studies	thematics in Engineering, Master Academic	
9.	0ML505	Stocha	astic Proces	sses		( OM1) Ma Studies	thematics in Engineering, Master Academic	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
		_				( I12) Indus	strial Engineering, Specialised Academic Studies	
10.	DZ01MS	Select	ed Chapters	s in Mathematics		( I22) Engii Studies	neering Management, Specialised Academic	
						( Z00) Envi	ironmental Engineering, Specialised Academic	
			·			( F20) Eng	ineering Animation, Master Academic Studies	
11.	IAM005	Mathe	matical Gar	me Theory		( OM1) Ma Studies	thematics in Engineering, Master Academic	
12.	SD0M03	Opera	tional Rese	arch		Studies	desy and Geomatics, Specialised Academic	
13.	SD0M15	Statist	ics			( GI0) Geo Studies	desy and Geomatics, Specialised Academic	
14.	ZR503	Statist	ical Advanc	ed Models		( Z01) Safe	ety at Work, Master Academic Studies	
15.	D0M03	Operational Research			( OM1) Ma Studies	thematics in Engineering, Doctoral Academic		

# TAS STUDIOS

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes							
	ID	Course name	, , , , , , , , , , , , , , , , , , , ,	Study programme name, study type				
16.	D0M04	Random Processes		( OM1) Mathematics in Engineering, Doctoral Academic Studies				
17.	D0M15	Statistics		( OM1) Mathematics in Engineering, Doctoral Academic Studies				
18.	D0M27	StatisticsApplied in Engineering		( OM1) Mathematics in Engineering, Doctoral Academic Studies				
19.	DAU004	Selected Chapters in Mathematics 2	!	( E20) Computing and Control Engineering, Doctoral Academic Studies				
				( H00) Mechatronics, Doctoral Academic Studies				
20.	DOM59	Fixed point theory		( OM1) Mathematics in Engineering, Doctoral Academic Studies				
				( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies				
				( E20) Computing and Control Engineering, Doctoral Academic Studies				
				( F00) Graphic Engineering and Design, Doctoral Academic Studies				
				( F20) Engineering Animation, Doctoral Academic Studies				
				( G00) Civil Engineering, Doctoral Academic Studies				
				( GI0) Geodesy and Geomatics, Doctoral Academic Studies				
21.	DZ01M	Salastad Chanters in Mathematics		( H00) Mechatronics, Doctoral Academic Studies				
۷۱.	D251W	Selected Chapters in Mathematics		( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies				
				( M00) Mechanical Engineering, Doctoral Academic Studies				
				( M40) Technical Mechanics, Doctoral Academic Studies				
				( OM1) Mathematics in Engineering, Doctoral Academic Studies				
				( S00) Traffic Engineering, Doctoral Academic Studies				
				( Z00) Environmental Engineering, Doctoral Academic Studies				
				( Z01) Safety at Work, Doctoral Academic Studies				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)					
1.	Mila Stoi	aković. Decomposition and representa	ation of fuzzy valued m	neasure, Fuzzy Sets and Systems, 112(2000) 251-256				
2.		aković, Fuzzy conditional expectation,	-	. , ,				
3.	Mila Stoj	aković, Fuzzy random variable, expec	tation, martingales, J.N	Math.Anal.Appl., 184(1994) 594-606.				
4.	Mila Stoj	aković, Fuzzy martingales, Stochastic	Analysis and Applicat	ions, 14(1996), 355-368.				
5.	Mila Stoj	aković, Zoran Stojaković, Support fund	ction for fuzzy set, Pro	ceedings of Royal Society, London A, 452(1996), 421-438.				
6.	Mila Stoj	aković, Zoran Stojaković, Addition and	I series of fuzzy sets, I	Fuzzy Sets and Systems, 83(1996) 341-346.				
7.	Mila Stoj	aković, Representation of fuzzy valued	d mappings, Fuzzy Se	ts and Systems, 98(1998) 375-381.				
8.	Mila Stoj	aković, Fuzzy valued measure, Fuzzy	Sets and Systems,65	(1994) 95-104 .				
9.	Mila Stoj 88.	aković, Common fixed point theorems	in complete metric an	d probabilistic spaces,Bull. Australian Math. Soc.,36(1987)73-				
10.	Mila Stoj	aković, Zoran Ovcin,Fixed point theore	ems and variational pr	inciple, Fuzzy Sets and Systems, 66(1994)353-356.				
Sur	nmary data	for teacher's scientific or art and profe	essional activity:					
Quot	ation total:		71					
Total	of SCI(SS	CI) list papers :	16					
Curre	ent projects	:	Domestic :	1 International : 1				



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name: Stojanović M. Goran								
					Associate Pro			
Name of the institution where the teacher works full time and Faculty of					Faculty of Te	echnical Sciences - Novi Sad		
starti	starting date: 01.09.199							
Scie	ntific or art f	ield:			Electronics			
Acad	demic caries	er	Year	Institution			Field	
Acad	demic title el	lection:	2010	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
PhD	thesis		2005	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
Magi	ister thesis		2003	Faculty of Technical Sci			Electronics	
	nelor's thesis		1996	Faculty of Technical Sci			Electronics	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E122	Introdu	uction to Ele	ectronics		Undergrad	asurement and Control Engineering, uate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EM421	Chara	cterization a	and Testing of Microelectr	onic Circuits	, ,	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	BM117A	Medica	al electronio	es		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
4.	BM117B Flexible electronics				( BM0) Biomedical Engineering, Undergraduate Academic Studies			
5.	BM118D	BM118D Modelling and simulation of biophysical proceses			ceses	( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
6.	BMI107 Materials and fabrication technologies in medical device				edical devices	Studies	medical Engineering, Undergraduate Academic er, Electronic and Telecommunication	
	Engineering, Undergraduate Academic Studies							
7.	EM457	Nanoe	electronics			Èngineerin	g, Undergraduate Academic Studies	
8.	P322	Introdu	uction to Pre	ecision Engineering		Studies	duction Engineering, Undergraduate Academic	
9.	DE202S		ced charac	terization techniques of el nponents	ectronic		ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	DE403S		n and fabric onic compor	ation of passive micro and nents	d nano		ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	E1SO01	Moder	n technolog	jies in electrical engineeri	ng		ver, Electronic and Telecommunication g, Specialised Professional Studies	
12.	EM512	Nanod	levices and	Nanomaterials			er, Electronic and Telecommunication g, Master Academic Studies	
13.	SI033 Electronics in medicine					ver, Electronic and Telecommunication g, Specialised Professional Studies		
14.	1903	1903 Application of microelectromechanical systems			ems	( I10) Indus	strial Engineering, Master Academic Studies	
15.	Advanced Techniques in Electronic Component and (				ver, Electronic and Telecommunication g, Doctoral Academic Studies			
DE403 Design and Fabrication of Passive Micro and Nano (E10) Power, Elect				ver, Electronic and Telecommunication g, Doctoral Academic Studies				
Rep	Representative refferences (minimum 5, not more than 10)							
1.							sition Sensor Made by Inkjet Printing Technology 0, UDK: 10.3390/s120201288	
2.	on a Flexible Substrate, Sensors, 2012, Vol. 12, pp. 1288-1298, ISSN 1424-8220, UDK: 10.3390/s120201288  Maksimović M., Stojanović G., Radovanović M., Malešev M., Radonjanin V., Radosavljević G., Smetana W.: Application of a					dosavljević G., Smetana W.: Application of a and Buildings Materials, 2012, Vol. 26, No 1, pp.		
3.		Internati	onal Journa				Carpet Fractal Antenna on a Hilbert Slot Patterned 980916, pp. 1-7, ISSN 1687-5869, UDK:	



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	presentative refferences (minimum 5, not more th	an 10)			
Milanović M., Stojanović G., Nikolić Lj., Radovanović M., Škorić B., Miletić A.: Electrical and structural characterisation of nanostructured titania coatings deposited on interdigitated electrode system, Materials chemistry and physics, 2011, Vol. 130, l 1-2, pp. 769-774, ISSN 0254-0584, UDK: 10.1016/j.matchemphys.2011.07.061					
5.	Savić S., Mančić L., Vojisavljević K., Stojanović in nickel manganite powder induced by mechal UDK: 10.1016/j.materresbull.2011.03.008				
Stojanović G., Lečić N., Damnjanović M., Živanov Lj.: Electrical and temperature characterization of NiZn ferrites,  INTERNATIONAL JOURNAL OF APPLIED ELECTROMAGNETICS AND MECHANICS, 2011, Vol. 35, No 3, pp. 165-176, ISSI 1383-5416, UDK: 10.3233/JAE-2011-1329					
7.	7. Goran Stojanović, Slavica Savić, Ljiljana Živanov, "Important Role of the Hall Effect Measurement System in a Modified Cours Materials in Electrical Engineering", IEEE Transaction on Education, vol. 52, no. 3, pp. 297- 304, 2009.				
8.	8. R. Raghavendra, P. Bellew, N. Mcloughlin, G. Stojanović, M. Damnjanović, V. Desnica, Lj. Živanov, "Characterization of Nove Varistor+Inductor Integrated Passive Devices," IEEE Electron Devices Letters, vol. 25, no. 12, pp. 778-780, December 2004.				
9.	9. G. Stojanović, "Nanoelektronika i primena nanomaterijala", Edicija tehničke nauke - Udžbenici, FTN Izdavaštvo (338), Novi Sac 2012.				
10.	10. G. Stojanović, Lj. Živanov, "Materijali u elektrotehnici", Edicija Tehničke Nauke - Udžbenici, FTN izdavaštvo, Novi Sad, 2007.				
Sur	mmary data for teacher's scientific or art and profe	essional activity:			
Quot	tation total :	78			
Tota	l of SCI(SSCI) list papers :	22			
Current projects : Domestic : 2 International : 2					2



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	Name and last name: Strezoski C. Vladimir							
Academic title: Full Profess					Full Professo	r		
Name of the institution where the teacher works full time and starting date:					-			
Scie	ntific or art f	ield:			Electroenerge	etics		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title el	lection:	1995	Faculty of Technical Sci	ences - Novi S	ad	Electroenergetics	
	thesis		1985	School of Electrical Eng			Electroenergetics	
	ster thesis		1978	School of Electrical Eng			Electroenergetics	
	elor's thesis	<u> </u>	1973	School of Electrical Engi			Electroenergetics	
				acher in the accredited stu				
	ID		e name				ogramme name, study type	
1.	E129A	Power	Engineerin	g Systems		Academic (E10) Pow	ver Software Engineering, Undergraduate Studies er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE0306	Analys	is of PES 2				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EE303	Analys	is of PES 1			Àcadémic		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	. ESI013 Multi-tier applications development in power systems					( ES0) Power Software Engineering, Undergraduate Academic Studies		
5.	DE115S Selected Chapters in Power Engineering System Analysis				( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
6.	Engineering, S					ver, Electronic and Telecommunication g, Specialised Academic Studies		
7.	DE313S	Select	ed Chapter	s in Power Engineering		Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
8.	DE114S	Selecte	ed Chapter	s in Distribution Network A	Analysis		ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	DE104	Netwo	rks	peration Management of I			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
10.	DE115	Selector Analys		s in Power Engineering Sy	ystem		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
11.	DE313	Select	ed Chapter	s in Power Engineering			ver, Electronic and Telecommunication g, Doctoral Academic Studies	
12.	DE114	Select	ed Chapter	s in Distribution Network A	Analysis		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Representative refferences (minimum 5, not more than 10)								
1.	1. Švenda G., Simendić Z., Strezoski V.: Advanced Voltage Control Integrated in DMS, INT J ELEC POWER, 2012, Vol. 43, pp. 333-343, ISSN 0142-0615							
2.	Strozopi V - A New Skaling Concept in Dower System Analysis, Naziv Assenics: IEE Proceedings (Conception, Transmission							
3.	Strangki V. Bekut D.: A Canonical Model for the Study of Faulte in Power Systems, Naziv časonica: IEEE Trans. On Power							
4.								
5.				kut D., Švenda G.: DMS nal Science, 2012, Vol. 1,			reen Distributed Generation Penetration in 0354-9836	
6.		V.: Adv					M DIS, 2011, Vol. 5, No 8, pp. 833-841, ISSN	
7.			nda G., Be rical Power		Canonical Mod	el Applicatio	on for Calculation on Power Systems Under Fault	
8.	Sarić A., Electrical		M., Strezos	ski V.: Fuzzy Multi-Objec	ctive Algorithm	for Multiple	Solution of Distribution Systems Voltage Control,	
	Liberiour / OWEI							

# ASSTUDIO POR STANDARD STANDARD

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)							
9.	Strezoski V., Katić N., Janjić D.: Voltage Cont Research , Electrical Power System Research			ent System, Electrical Power	System			
10.	Strezoski V., Trpezanovski Lj.: Three-Phase A	symmetrical Load-Flow Naziv časopisa: Electrical Power						
Summary data for teacher's scientific or art and professional activity:								
Quo	tation total :	46						
Tota	l of SCI(SSCI) list papers :	12						
Curr	ent projects :	Domestic :	6	International :	14			



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	Name and last name: Struharik J. Rastislav							
Academic title:					Assistant Professor			
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				17.06.2002			
	ntific or art f				Electronics			
Acad	lemic carie	er	Year	Institution			Field	
	lemic title e	lection:	2010	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
	thesis		2009				Electronics	
	thesis		2009	Faculty of Technical Sci			Electronics	
<b>—</b>	ster thesis		2005	Faculty of Technical Sci			Electronics	
	elor's thesi		1999	Faculty of Technical Sci			Electronics	
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es T		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EM400A	Compl	ex Digital S	System Design			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EM408A	RF and	d microwav	e electronics		, ,	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EM420A	Modell	ling and sin	nulation of RF and microw	ave circuits		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EM458	Syster	n Level Des	sign			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EM459	Functional Verification of Hardware				(E10) Pow Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	ETI17	Compl	ex Digital S	System Design		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies	
7.	ETI32	2 Functional Verification of Digital Electronic Systems				( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies	
8.	DE200S	E200S Algorithms and Complexity-an Advanced Course					ver, Electronic and Telecommunication g, Specialised Academic Studies	
9.	DE300S	Rando	mised App	roximation Algorithms			ver, Electronic and Telecommunication g, Specialised Academic Studies	
10.	DE515S	Desigr	n of Comple	ex Digital Systems - Advar	nced Course	( E11) Pov Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EM504	Failure	Resistant	Digital Systems			er, Electronic and Telecommunication g, Master Academic Studies	
12.	EM507	Applica	ation-Speci	fic Integrated Circuit Desig	gn (ASIC)		er, Electronic and Telecommunication g, Master Academic Studies	
13.	SI043	Compl	ex Digital S	System Design			ver, Electronic and Telecommunication g, Specialised Professional Studies	
14.	EM518A	EM518A Advanced simulation techniques of RF and microwave circuits				, ,	er, Electronic and Telecommunication g, Master Academic Studies	
15.	DE200	Algorit	hms and C	omplexity-an Advanced C	ourse	, ,	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
16.	DE300	Rando	mised App	roximation Algorithms		Èngineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
17.	17. DE515 Design of Complex Digital Systems - Advanced Course (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies							
Rep	Representative refferences (minimum 5, not more than 10)							
1.	Ractislay I.R. Strubarik Ladislay A. Novak "Intellectual property core implementation of decision trees". IET Computers&Digital							
2.				lislav A. Novak "Evolving l 09, pp. 1003-1060	Decision Trees	in Hardwar	e", Journal of Circuits, System and Computers,	
3.				Novak, Alessandra Fann stems, Vol. 3, Issue 2, Ap			ral Network Structure Using Decision Trees",	
4.	Ivan Mez	ei, Rast	islav Struha	arik, "Design of Huffman D	ecoder FPGA	Core", ICES	ST 07, Ohrid, Macedonia, June 25-27 2007	
5.					on of the 2D-D0	CT/IDCT Co	re for the Motion Picture Compression", ICEST	
	07, Ohrid, Macedonia, June 25-27 2007							

# TE STUDIO STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)						
6. Vuk Vranković, Rastislav Struharik, "Dizajn i verifikacija DLX procesora", Naučno-stručni simpozijum "Informacione te Jahorina 2007", Jahorina, Bosna i Hercegovina, Mart 28-30 2007						
7. Rastislav Struharik, Ladislav Novak, Alessandra Fanni, "Finding an Optimal Neural Network Structure Using Decision Tree WSEAS NNA, FSFS, EC 2004 Conferences in Udine, Italy, March 25-27 2004					sion Trees",	
8.	Rastislav Struharik, Ivan Mezei, "8051 IP Core	for FPGA Application	s", TELFOR 08, I	Beograd, Srbija, November 2	25-27 2008	
9.	Ivan Mezei, Rastislav Struharik, "Sistem za pre 2008	enos slike za potrebe ι	u bušotinama", T	ELFOR 08, Beograd, Srbija,	November 25-27	
10.	Ivan Mezei, Rastislav Struharik, "Sistem za pre Srbija	enos video signala baz	ziran na korišćenj	ju FPGA tehnologije", Tehnik	a, Beograd,	
Summary data for teacher's scientific or art and professional activity:						
Quot	ation total :	0				
Tota	of SCI(SSCI) list papers :	2				
Curre	ent projects :	Domestic :	1	International:	1	



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

_	-			•				
	Name and last name: Suvajdžin F						a	
					Assistant Professor			
· · · · · · · · · · · · · · · · · · ·					Faculty of Technical Sciences - Novi Sad			
	ntific or art f	iold:			<b>-</b>	01.12.1998 Applied Computer Science and Informatics		
	lemic carie		Year	Institution	Applied Colli	puter Scienc	Field	
	lemic title e		2008	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
	thesis	icotion.	2008	Faculty of Technical Sci			Computer Science	
	ster thesis		2000	Faculty of Technical Sci			Applied Computer Science and Informatics	
⊢–	elor's thesis	 S	1998	Faculty of Technical Sci			Applied Computer Science and Informatics	
			ld by the te	acher in the accredited stu			The state of the s	
					, р д			
	ID	Course	e name			Study pro	gramme name, study type	
1.	E225	Onera	ting System	ne		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
	LZZS	Орста	ung Oysten	10		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
2.	E234	Compi	ilers			( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
						( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
							asurement and Control Engineering, uate Academic Studies	
3.	EE301 Operating Systems and Competitive Programming					(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
					( F10) Eng Studies	( F10) Engineering Animation, Undergraduate Academic Studies		
					chatronics, Undergraduate Academic Studies			
							tal Traffic and Telecommunications, luate Academic Studies	
5.	ISIT12	Osnov	e informaci	onih sistema			vare and Information Technologies (Inđija), luate Professional Studies	
6.	ISIT22	Osnov	e baza pod	ataka			vare and Information Technologies (Inđija), luate Professional Studies	
7.	SE0034	4 Compilers				( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies		
		( E20) Computing and Control Engineering, Master Academic Studies						
8.	l làcu						wer Software Engineering, Master Academic	
			-			( F20) Engineering Animation, Master Academic Studies		
	( SE						tware Engineering and Information Technologies, ademic Studies	
9.	9 F402 Electronic Publishing (F00				( F00) Gra Studies	phic Engineering and Design, Master Academic		
10.	(E20) Computing and Control Engineering, Doctoral							
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.	Rakić P., Milašinović D., Živanov Ž., Suvajdžin Rakić Z., Nikolić M., Hajduković M.: MPI–CUDA parallelization of a finite-strip							
2.	Zorica Su	ıvajdžin	, Miroslav H				osing Assistant, Computer Science and	
3.	Miroclay Haiduković, Zorica Suvajdžin, Žarko Živanov, Character oriented program editing, habit or necessity. Novi Sad Journal							

# LANAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10) Hajduković M., Suvajdžin Z., Živanov Ž. Naziv: A problem of program execution time measurement Naziv časopisa: Novi Sad Journal of mathematics, Novi Sad Journal of Mathematics, 2003, Vol. 33, No 1, pp. 67-73, ISSN 1450-5444, UDK: 51 Rakić P., Stričević L., Suvajdžin Rakić Z.: Statically Typed Matrix: in C library, 5. Balkan Conference in Informatics, Novi Sad: 5 ACM, 16-20 Septembar, 2012, pp. 217-222 Milašinović D., Živanov Ž., Rakić P., Suvajdžin Rakić Z., Nikolić M., Hajduković M., Borković A., Milaković I.: A Finite-Strip 6 Analysis of Nonlinear Shear-Lag Effect Supported by Automatic Visualization 7 Suvajdžin Rakić Z., Rakić P.: Computers and Education, 1. VIPSI, Nepoznato, 3-4 April, 2009, ISBN 86-7466-117-3 Zorica Suvajdžin, Miroslav Hajduković, Program Composing Assistant For Novice Programmers, The ASEE Mid-Atlantic Spring 8 Conference 2006, Brooklyn NY, April 2006, abstract+5 pages (CD-ROM) Zorica Suvajdžin, Miroslav Hajduković, Towards Program Composing Assistants, Proceedings of the 2005 International 9 Conference on Programming Languages and Compilers, PLC"05, Las Vegas, Nevada, USA, jun 2005, pp 142-147 Rakić P., Živanov Ž., Suvajdžin Rakić Z., Stričević L., Hajduković M.: Characteristics of Operating System for Wireless Sensor 10 Network Applications, 9. International Symposium Interdisciplinary Regional Research - ISIRR, Novi Sad, , pp. 50-50 Summary data for teacher's scientific or art and professional activity: Quotation total: 0 Total of SCI(SSCI) list papers : 0 0 Current projects Domestic: International: 0

# ASTRAS STUDIO

### UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Šafranj F. Jelisaveta			
Academic title:					Assistant Professor			
Name of the institution where the teacher works full time and					Faculty of Technical Sciences - Novi Sad			
starti	ng date:				15.10.2000			
	ntific or art f				English			
Acad	lemic caries	er	Year	Institution			Field	
Acad	lemic title e	lection:	2009	Faculty of Technical Sci	ences - Novi Sa	ad	English	
PhD	thesis		2008	Faculty of Philology - Be	eograd		English	
	ster thesis		2000	Faculty of Philology - Be	eograd		English	
Educ Thes	ation Speci	alist	1994	Faculty of Philology - Be	eograd		English	
Bach	elor's thesi	S	1982	Faculty of Philosophy - I	Novi Sad		English	
List o	of courses b	eing he	ld by the te	acher in the accredited st	udy programme	s		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	AEJ1L	Englis	h Language	e - Elementary		( A00) Arcl	hitecture, Undergraduate Academic Studies	
2.	AEJ2L	Englis	h Language	intermediate		( A00) Arcl	hitecture, Undergraduate Academic Studies	
3.	AEJ2Z	Englis	h intermedi	ate		( A00) Architecture, Undergraduate Academic Studies		
AEJ3Z English Language - upper intermediate				e - upper intermediate		( A00) Arcl	hitecture, Undergraduate Academic Studies	
5.	5. EJ01L English Language – Elementary					( M20) Med Undergrad ( M30) End Academic ( M40) Tec Undergrad ( P00) Prod Studies ( S00) Traf Academic ( S01) Pos	chnical Mechanics and Technical Design, luate Academic Studies duction Engineering, Undergraduate Academic ffic and Transport Engineering, Undergraduate	
6.	6. EJ01Z English Language - Elementary				Engineerin (F00) Gra Academic (MR0) Me Undergrad (Z01) Safe (ZC0) Cle Academic (ZP0) Disa Undergrad	asurement and Control Engineering, luate Academic Studies ety at Work, Undergraduate Academic Studies an Energy Technologies, Undergraduate		

# THE STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	st of courses being held by the teacher in the accredited study programmes						
	ID	Course name	Study programme name, study type				
			( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
			( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies				
7.	EJ02L	English Language – Pre-Intermediate	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies				
			( Z01) Safety at Work, Undergraduate Academic Studies				
			( ZC0) Clean Energy Technologies, Undergraduate Academic Studies				
			( ZP0) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies				
			(Z20) Environmental Engineering, Undergraduate Academic Studies				
			( I10) Industrial Engineering, Undergraduate Academic Studies				
8.	EJ02Z	English Languago Pro Intermediate	( 120) Engineering Management, Undergraduate Academic Studies				
0.	E3022	English Language – Pre-Intermediate	( S00) Traffic and Transport Engineering, Undergraduate Academic Studies				
			( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies				
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
	EJ03Z	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies					
9.		Z English Language - Intermediate	( Z01) Safety at Work, Undergraduate Academic Studies				
			(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
			(Z20) Environmental Engineering, Undergraduate Academic Studies				
			( F00) Graphic Engineering and Design, Undergraduate Academic Studies				
			( Z01) Safety at Work, Undergraduate Academic Studies				
10.	EJ04L	English Language – Upper Intermediate	(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
			(Z20) Environmental Engineering, Undergraduate Academic Studies				
			( E20) Computing and Control Engineering, Undergraduate Academic Studies				
			( ES0) Power Software Engineering, Undergraduate Academic Studies				
			( F10) Engineering Animation, Undergraduate Academic Studies				
11.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies				
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies				
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies				
			(AH0) Architecture, Master Academic Studies				

# ASTRAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Academic Studies   (F10) Engineering Animation, Undergraduate Academic Studies   (G10) Geodesy and Geomatics, Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (E20) Computing and Control Engineering, Undergraduate Academic Studies   (E20) Power Software Engineering, Undergraduate Academic Studies   (E20) Power Software Engineering, Undergraduate Academic Studies   (E20) Power Software Engineering, Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   (F10) Engineering Animation, Undergraduate Academic Studies   (E20) Computing and Control Engineering, Undergraduate Academic Studies   (E20) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electro	List c	List of courses being held by the teacher in the accredited study programmes							
Academic Studies   FiD Engineering Animation, Undergraduate Academic Studies   GFID Engineering Animation, Undergraduate Academic Studies   GFID Engineering Animation, Undergraduate Academic Studies   GFID Engineering and Information Technologie Undergraduate Academic Studies   GFID Software Engineering and Information Technologie Undergraduate Academic Studies   GFID Engineering and Engineering and Information Technologie Lozinica, Undergraduate Academic Studies   GFID Engineering Animation, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   GFID Power, Electronic and Telecommunication Engineering, Undergraduate Academic S		ID	Course name	Study programme name, study type					
EJZL   English Language – Intermediate   GiD) Geodesy and Geomatics, Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies (SEL) Software Engineering, Undergraduate Academic Studies (ESO) Power Software Engineering, Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (SEC) Software Engineering and Information Technologie Undergraduate Academic Studies (SEC) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies (ESO) Computing and Control Engineering, Undergraduate Academic Studies (ESO) Computing and Control Engineering, Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering and Information Technologie Undergraduate Academic Studies (ESO) Software Engineering (Endiperior Studies (ESO) Software Engineering (Endiperior Studies (ESO) Software Engineering (Endiperior Studies (ESO) Software Engineering (Endi									
Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E2D) Computing and Control Engineering, Undergraduate Academic Studies  (E3D) Power Software Engineering, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studie									
Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (ESO) Power Software Engineering, Undergraduate Academic Studies  (ESO) Power Software Engineering, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (SID) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEO) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E2O) Computing and Control Engineering, Undergraduate Academic Studies  (E1O) Engineering Animation, Undergraduate Academic Studies  (E1O) Engineering Animation, Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate	12.	EJ2L	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
Loznica, Undergraduate Academic Studies   (E20) Computing and Control Engineering, Undergraduate Academic Studies   (ES0) Power Software Engineering, Undergraduate Academic Studies   (E50) Power Software Engineering, Undergraduate Academic Studies   (F10) Engineering Animation, Undergraduate Academic Studies   (G10) Geodesy and Geomatics, Undergraduate Academic Studies   (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies   (E20) Computing and Control Engineering, Undergraduate Academic Studies   (E20) Computing and Control Engineering, Undergraduate Academic Studies   (F10) Engineering Animation, Undergraduate Academic Studies   (G10) Geodesy and Geomatics, Undergraduate Academic Studies   (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE2) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE3) Software Engineering and Information Technologie Undergraduate Academic Studies   (SE3) Software Engineering and Information Technologie Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies   (E10) Power, Electronic and Telecommunication Engi				( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
Academic Studies (ESD) Power Software Engineering, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (GI0) Geodesy and Geomatics, Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (AH0) Architecture, Master Academic Studies (E20) Computing and Control Engineering, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (GI0) Geodesy and Geomatics, Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering and Information Technologie Undergraduate Academic Studies (SED) Software Engineering Alierate Academic Studies				( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (GI0) Geodesy and Geomatics, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (AH0) Architecture, Master Academic Studies  (E20) Computing and Control Engineering, Undergraduat Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication En				(E20) Computing and Control Engineering, Undergraduate Academic Studies					
Studies   GIO Geodesy and Geomatics, Undergraduate Academic Studies   GIO Geodesy and Geomatics, Undergraduate Academic Studies   GEO Software Engineering and Information Technologie Undergraduate Academic Studies   GEL Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GEL Computing and Control Engineering, Undergraduate Academic Studies   GED Software Engineering and Information Technologie Undergraduate Academic Studies   GED Software Engineering and Information Technologie Undergraduate Academic Studies   GED Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GED Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GED Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GED Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GED Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies   GED Software Engineering and Telecommunication Engineering, Undergraduate Academic Studies   GED Software Engineering and Design, Undergraduate Academic Studies   GED Software Engineering, Undergraduate Acade				1, ,					
Studies  (SEO) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E2O) Computing and Control Engineering, Undergraduat Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (GI0) Geodesy and Geomatics, Undergraduate Academic Studies  (SEO) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEO) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEO) Software Engineering and Information Technologie Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  16. EJE6 English Language - First Certificat 2 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  17. EJEI English Language for Engineers (H00) Mechatronics, Undergraduate Academic Studies  18. EJEI1 English in Engineering 1 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  19. EJEI2 English in Engineering 1 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power				1, , , ,					
Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (HO) Architecture, Master Academic Studies  (E20) Computing and Control Engineering, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (GI0) Geodesy and Geomatics, Undergraduate Academic Studies  (SE) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (SE) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate	13.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
Loznica, Undergraduate Academic Studies (AHO) Architecture, Master Academic Studies (E20) Computing and Control Engineering, Undergraduate Academic Studies (E20) Computing and Control Engineering, Undergraduate Academic Studies (F10) Engineering Animation, Undergraduate Academic Studies (G10) Geodesy and Geomatics, Undergraduate Academic Studies (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies (SE1) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies (SE1) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies					
(E20) Computing and Control Engineering, Undergraduate Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (G10) Geodesy and Geomatics, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  17. EJEI English Language for Engineers  (H00) Mechatronics, Undergraduate Academic Studies  18. EJEI1 English in Engineering 1  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Design, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering and Design, Undergraduate Academic Studies  (E10) Graphic Engineering and Construction Engineering, Undergraduate Academic Studies				( SEL) Software Engineering and Information Technologies -					
Academic Studies  (F10) Engineering Animation, Undergraduate Academic Studies  (G10) Geodesy and Geomatics, Undergraduate Academic Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Undergraduate Academic Studies  (SE1) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  16. EJE6 English Language - First Certificate 2  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  17. EJEI English Language for Engineers  (H00) Mechatronics, Undergraduate Academic Studies  18. EJEI1 English in Engineering 1  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  19. EJEI2 English in Engineering 2  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  21. EJF6 English Language for GRID 2  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering and Construction Engineering, Undergraduate Academic Studies				(AH0) Architecture, Master Academic Studies					
Studies  (GIO) Geodesy and Geomatics, Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SED) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				( E20) Computing and Control Engineering, Undergraduate Academic Studies					
Studies  (SE0) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Undergraduate Academic Studies  (SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering and Design, Undergraduate Academic Studies  (E10) Power, Electronic and				1, , , ,					
Undergraduate Academic Studies  ( SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies  15. EJE5 English Language – First Certificat 1  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (H00) Mechatronics, Undergraduate Academic Studies  (H00) Mechatronics, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering, Undergraduate Academic Studies  (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	14.	EJ3L	English Language – Advanced	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies					
Loznica, Undergraduate Academic Studies  15. EJE5 English Language – First Certificat 1  EJE6 English Language - First Certificate 2  EJE6 English Language - First Certificate 2  EJE7 English Language for Engineers  (H00) Mechatronics, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (H00) Mechatronics, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Graphic Engineering, Undergraduate Academic Studies  (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies									
English Language - First Certificat 1   Engineering, Undergraduate Academic Studies				( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies					
English Language - First Certificate 2 Engineering, Undergraduate Academic Studies  17. EJEI English Language for Engineers  (H00) Mechatronics, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  18. EJEI1 English in Engineering 1  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (F00) Graphic Engineering and Design, Undergraduate Academic Studies  (F00) Civil Engineering, Undergraduate Academic Studie (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	15.	EJE5	English Language – First Certificat 1						
18. EJEI1 English in Engineering 1 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  19. EJEI2 English in Engineering 2 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  20. EJF5 English Language for GRID 1 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  21. EJF6 English Language for GRID 2 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  22. EJGR English Language – ESP Course (G00) Civil Engineering, Undergraduate Academic Studies (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	16.	EJE6	English Language - First Certificate 2						
19. EJEI2 English in Engineering 1 Engineering, Undergraduate Academic Studies  19. EJEI2 English in Engineering 2 (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  20. EJF5 English Language for GRID 1 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  21. EJF6 English Language for GRID 2 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  22. EJGR English Language – ESP Course (G00) Civil Engineering, Undergraduate Academic Studies  (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	17.	EJEI	English Language for Engineers	( H00) Mechatronics, Undergraduate Academic Studies					
20. EJF5 English Language for GRID 1 English Language for GRID 2 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  21. EJF6 English Language for GRID 2 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  22. EJGR English Language – ESP Course (G00) Civil Engineering, Undergraduate Academic Studies (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	18.	EJEI1	English in Engineering 1						
20. EJF5 English Language for GRID 1 Academic Studies  21. EJF6 English Language for GRID 2 (F00) Graphic Engineering and Design, Undergraduate Academic Studies  22. EJGR English Language – ESP Course (G00) Civil Engineering, Undergraduate Academic Studie (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	19.	EJEI2	English in Engineering 2						
21. EJF6 English Language for GRID 2 Academic Studies  22. EJGR English Language – ESP Course (G00) Civil Engineering, Undergraduate Academic Studie (M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	20.	EJF5	English Language for GRID 1						
( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies	21.	EJF6	English Language for GRID 2						
Undergraduate Academic Studies	22.	EJGR	English Language – ESP Course	( G00) Civil Engineering, Undergraduate Academic Studies					
( M30) Energy and Process Engineering, Undergraduate				1					
Academic Studies			5.11.1						
23. EJM English Language – ESP Course (M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies	23.	EJM	English Language – ESP Course						
( P00) Production Engineering, Undergraduate Academic Studies				( P00) Production Engineering, Undergraduate Academic					
24. EJPST English Language in Postal Traffic (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies	24.	EJPST	English Language in Postal Traffic						
25. EJSIT English Language in Traffic and Transport (S00) Traffic and Transport Engineering, Undergraduate Academic Studies	25.	EJSIT	English Language in Traffic and Transport						

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## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List	ist of courses being held by the teacher in the accredited study programmes					
	ID	Course name	Study programme name, study type			
26.	EJZ	English Language - Specialized	(Z20) Environmental Engineering, Undergraduate Academic Studies			
27.	F320	English Language – ESP Course 1	( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
28.	F321	English Language – ESP Course 2	( F00) Graphic Engineering and Design, Undergraduate Academic Studies			
29.	ISIT01	English Language 1	( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies			
30.	ASI381	English language 1	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies			
31.	ASI431	English Language 2	( AS0) Scenic Architecture, Technique and Design, Undergraduate Academic Studies			
32.	BMI80	English 1	( BM0) Biomedical Engineering, Undergraduate Academic Studies			
33.	BMI81	English 2	( BM0) Biomedical Engineering, Undergraduate Academic Studies			
34.	EJIIM	English for Specific Purposes	( I10) Industrial Engineering, Undergraduate Academic Studies			
34.	LJIIIVI	English for Specific Fullposes	( I20) Engineering Management, Undergraduate Academic Studies			
35.	ETI15	Engleski jezik - srednji	( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
36.	ETI20	Engleski jezik - napredni	( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
			( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( ES0) Power Software Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
37.	EJ1Z	English Language - Elementary	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologie Loznica, Undergraduate Academic Studies			
			(AH0) Architecture, Master Academic Studies			
			( E20) Computing and Control Engineering, Undergraduate Academic Studies			
			( ES0) Power Software Engineering, Undergraduate Academic Studies			
			( F10) Engineering Animation, Undergraduate Academic Studies			
38.	EJ2Z	English Language – Intermediate	( GI0) Geodesy and Geomatics, Undergraduate Academic Studies			
			( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies			
			( SEL) Software Engineering and Information Technologies - Loznica, Undergraduate Academic Studies			
			(AH0) Architecture, Master Academic Studies			
39.	eja	English Language – a Specialized Course	(AH0) Architecture, Master Academic Studies			
40.	EJE7	English Language - Advanced	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies			
41.	F507	English Language for GRID 3	( F00) Graphic Engineering and Design, Master Academic Studies			
42.	NIT03	Business English	( NIT) Industrial Engineering - Advanced Engineering Technologies, Master Academic Studies			
Rep	Representative refferences (minimum 5, not more than 10)					

# STAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)					
1.	. Analiza diskursa udžbenika engleskog jezika, Monografija, Zadužbina Andrejević, Beograd 2006.					
2.	2. Retorička organizacija poslovne vesti, Monografija, Zadužbina Andrejević, Beograd 2009.					
3. Engleski jezik za GRID 3 - Academic Writing for Graphic Engineering and Design, FTN Izdavaštvo, Novi Sad 2012.						
4. Using Internet in English Language Teaching, NEW EDUCATIONAL REVIEW, (2011), vol. 26 br. 4, str. 45-59.						
5.	8. Reflections of English Language Teachers Concerning Computer Assisted Language Learning (Call), NEW EDUCATIONAL REVIEW, (2011), vol. 23 br. 1, str. 269-282.					
6.	6. Pragmatički aspekt udžbenika engleskog jezika, Pedagogija, 2009, 1, str.133-145.					
7.	7. Students' Communicative Competence, Zbornik Instituta za pedagoška istraživanja, 2009, 1, str. 180-195.					
8.	8. Retorička analiza lida poslovne vesti, Zbornik Matice Srpske za filologiju i lingvistiku, 2011, 1, str.191-210.					
9.	Some Aspects of Technical Statements in Power Engineering, Zbornik radova, XI Međunarodni simpozijum Energetska elektronika Ee 2001, str.150-153.					
10.	O. Genre Analysis of Research Abstract of an Engineering Scientific Paper, In Proceedings of English Language and Literature Studies: Interfaces and Integrations, 10-12 December 2004, Faculty of Philology, Belgrade, pp.365-374.					
Sui	Summary data for teacher's scientific or art and professional activity:					
Quo	station total :	0				
Tota	al of SCI(SSCI) list papers :	20				
Current projects : Domestic : 0 International : 1					1	



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:						Šećerov E. Emil				
Acad	emic title:					Assistant Professor				
		titution v	vhere the te	acher works full tin	ne and	Faculty of Technical Sciences - Novi Sad				
	ng date:					01.09.1987				
Scientific or art field:					Telecommunications and Signal Processing					
Acad	emic carie	er	Year	Institution				Field		
Acad	emic title e	lection:	2009					Telecon	nmunications and Signal	Processing
PhD	thesis		1998	Faculty of Techni	cal Sci	ences - Novi Sa	ad	Electrica	al and Computer Engine	ering
Magi	ster thesis		1993	Faculty of Techni	cal Sci	ences - Novi Sa	ad	Electrica	al and Computer Engine	ering
Bach	elor's thesi	S	1987	Faculty of Techni	cal Sci	ences - Novi Sa	ad	Electrica	al and Computer Engine	ering
List	of courses b	eing he	ld by the tea	acher in the accred	lited stu	udy programme	S			
	ID	Course	e name				Study prog	gramme ı	name, study type	
1.	EK458	Teleco	mmunicatio	on networks					onic and Telecommunica graduate Academic Stud	
2.	S1329P	Introdu	ıction to Co	mmunication Netw	orks				and Telecommunication demic Studies	ns,
3.	S1437P	Teleko	munikacion	ne mreže i saobrać	aj		Ùndergradu	uate Acad	and Telecommunication demic Studies	
4.	DE111S	Algorit	hms for Dig	ital Signal Process	ing				ronic and Telecommunic dised Academic Studies	ation
5.	EK532	Teleco	mmunicatio	on System Software	е				onic and Telecommunica Academic Studies	ation
6.	EK535	Comp	uter Telepho	one Integration			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies			
7.	S0152	Next G	Seneration 1	relecommunication	Netwo	orks	( S01) Post Academic S		and Telecommunication	ns, Master
							( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies ( H00) Mechatronics, Doctoral Academic Studies			
8.	DE111	Algorit	hms for Dig	ital Signal Process	ing		` '			
							( OM1) Mat Studies	thematics	s in Engineering, Doctora	al Academic
Rep			•	num 5, not more tha	,					
1.	Science .	Journal,	Vol 17, No.	1, 1991, pp 61-65					Virtual Machine System"	
2.	Conferen	ce on S	ystem Scie	nce Abstract of Par	pewrs,	Wroclaw, 1989	, pp. 108.		Virtual Machine System"	
3.				vić M., "Efficient ker ference on System					deterministic enviromen 995, pp 104-111.	t", Procedeengs
4.									ol in Telephone Exchang aw, Poland, 1995, pp 11:	
5.									ments in Strored Prograr udapest, 1995, pp 263-2	
6.									d in subscriber digital col cations, Vol. IV, 1998, P	
7.									gacy Systems", Eurocon ade, pp 1072-1076.	2005, The
8.				ećerov E., "Merenj . 114-1 – 114-4.	e apsol	lutnog vremena	ı u VMS", XI	II Simpoz	zijum o informacionim te	nnologijama,
9.				ca Ž., Djordjević S ′III, Novi Sad, 1989			uslova za uk	djučivanje	e OS u VMS", XXXIII Juç	goslovenska
10.				đerov E., "Segmen ska konferencija El					oristupom kap podrška s 213.	istemu virtuelnih
		for teac	her's scient	tific or art and profe		ll activity:				
	ation total :	21) 1:-4			0					
	of SCI(SS) ent projects		apers :		1 Dome	setic ·	0	Int	ternational :	0
Julie	our brolects	•			שוווטם		)		contational .	ľ



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	e and last n	ame.			Šenk I. Vojin			
	lemic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad			
	ng date:				01.01.1987			
Scier	Scientific or art field:				Telecommunications and Signal Processing			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title el	lection:	2003	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
PhD	thesis		1992	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing	
Magi	ster thesis		1989	School of Electrical Eng	ineering - Beog	ırad	Telecommunications and Signal Processing	
Bach	elor's thesis	S	1981	Faculty of Technical Sci	ences - Novi Sa	ad	Telecommunications and Signal Processing	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EK310	Introdu	uction to Info	ormation Theory		Studies	medical Engineering, Undergraduate Academic er, Electronic and Telecommunication	
							ig, Undergraduate Academic Studies	
2.	EK462	Entrep	reneurship	in ICT		(E10) Pow	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EK464	Comm	nunication S	ystems Design		Undergrad	tal Traffic and Telecommunications, uate Academic Studies	
				, ,		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
4.	DE310S	Encoding and Signal Transmission Techni			ques	Engineerin	ver, Electronic and Telecommunication  g, Specialised Academic Studies	
5.	DE510S	Algorithms of Signal Detection and Estimat			on	Engineerin	ver, Electronic and Telecommunication ng, Specialised Academic Studies	
6.	EK521	Information and Communication Theory			Academic (E10) Pow	er, Electronic and Telecommunication		
7.	EK533	Detect	tion and Est	imation		Engineering, Master Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
							thematics in Engineering, Master Academic	
8.	EK534	Crypto	graphy Sys	stem for Data Protection	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies			
9.	EK536	Coding	g Technique	es		(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
10.	RPR004		reneurship, versities	, Innovation, Knowledge R	Regions - Role	( RPR) Regional Development Planning and Management, Master Academic Studies		
				Àcadémie		nputing and Control Engineering, Doctoral Studies		
11.	DAU001	Proces		s in Telecommunications	and Signal	( H00) Med	chatronics, Doctoral Academic Studies	
						( OM1) Ma Studies	thematics in Engineering, Doctoral Academic	
12.	DE310	Encod	ding and Sig	gnal Transmission Technic	ques		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
13.	DE510	Algorit	hms of Sigr	nal Detection and Estimati	on	on (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
1.							g ACE Spectrum, IEEE Transactions on 0.1109/TCOMM.2009.08.070548	
2.							/indow Fountain Codes for Unequal Error 0-2516, UDK: 10.1109/TCOMM.2009.09.070616	
3.				Seneralized ACE Constrai pp. 32-34, ISSN 1089-77			wth LDPC Code Design , IEEE Communications 1.2008.071457	

# FACU

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)								
V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, vol.11, no. 7, 2004, pp. 589-593.								
D. Bajić, V. Šenk, M. Despotović, "Subsets of the STM-1 frame-alignment signal: a monitoring analysis", IEE Proc. Commun., vol. 149, no. 5, Oct. 2002. pp. 242-248.								
Miroslav Despotović, Vojin Šenk, Bartolomeu F. Uchôa Filho,"DISTANCE SPECTRA OF CONVOLUTIONAL CODES OVER PARTIAL-RESPONSE CHANNELS", IEEE Transactions on Communications, vol. 49, no.7, pp. 1121-1124, July 2001.								
Kovačević M., Šenk V.: On Possible Dependence Structures of a Set of Random Variables, Acta Mathematica Hungarica, 2012, Vol. 135, No 3, pp. 286-296								
Bojović Ž., Perić Z., Delić V., Šećerov E., Sečujski M., Šenk V.: "Comparative Analysis of the Performance of Different Codecs in a live VoIP network using SIP protocol", Electronics and electrical engineering, 2012, Vol. 117, No 1, pp. 37-42, ISSN 1392-1215								
				luling Policy ,				
Bojović ž., Šenk V., Dobromirov D., Bojović P.: Intervendor working of VOIP networks , Journal of the Institute of Telecommunications Professionals, 2011, Vol. 5, No 3, pp. 26-32, ISSN 1755-9278								
mmary data for teacher's scientific or art and profe	essional activity:							
tation total :	141							
l of SCI(SSCI) list papers :	18							
Current projects : Domestic : 3 International :								
	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced vol.11, no. 7, 2004, pp. 589-593.  D. Bajić, V. Šenk, M. Despotović, "Subsets of t 149, no. 5, Oct. 2002. pp. 242-248.  Miroslav Despotović, Vojin Šenk, Bartolomeu F PARTIAL-RESPONSE CHANNELS", IEEE Tra Kovačević M., Šenk V.: On Possible Depende Vol. 135, No 3, pp. 286-296  Bojović Ž., Perić Z., Delić V., Šećerov E., Seču a live VoIP network using SIP protocol", Electro Bojović Ž., Šećerov E., Dobromirov D., Šenk V Electronics and electrical engineering, 2011, V Bojović ž., Šenk V., Dobromirov D., Bojović P.: Telecommunications Professionals, 2011, Vol. mmary data for teacher's scientific or art and profestion total:	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Bas vol.11, no. 7, 2004, pp. 589-593.  D. Bajić, V. Šenk, M. Despotović, "Subsets of the STM-1 frame-aligni 149, no. 5, Oct. 2002. pp. 242-248.  Miroslav Despotović, Vojin Šenk, Bartolomeu F. Uchôa Filho, "DISTA PARTIAL-RESPONSE CHANNELS", IEEE Transactions on Commur Kovačević M., Šenk V.: On Possible Dependence Structures of a Se Vol. 135, No 3, pp. 286-296  Bojović Ž., Perić Z., Delić V., Šećerov E., Sečujski M., Šenk V.: "Con a live VoIP network using SIP protocol", Electronics and electrical engineering, 2011, Vol. 7, No 113, pp. 67-7  Bojović Ž., Šećerov E., Dobromirov D., Šenk V.: Intervendor working of Telecommunications Professionals, 2011, Vol. 5, No 3, pp. 26-32, IS:  mmary data for teacher's scientific or art and professional activity:  lation total:	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise vol.11, no. 7, 2004, pp. 589-593.  D. Bajić, V. Šenk, M. Despotović, "Subsets of the STM-1 frame-alignment signal: a mod 149, no. 5, Oct. 2002. pp. 242-248.  Miroslav Despotović, Vojin Šenk, Bartolomeu F. Uchôa Filho, "DISTANCE SPECTRA (PARTIAL-RESPONSE CHANNELS", IEEE Transactions on Communications, vol. 49, Kovačević M., Šenk V.: On Possible Dependence Structures of a Set of Random Vari Vol. 135, No 3, pp. 286-296  Bojović Ž., Perić Z., Delić V., Šećerov E., Sečujski M., Šenk V.: "Comparative Analysi a live VoIP network using SIP protocol", Electronics and electrical engineering, 2012, 'Bojović Ž., Šećerov E., Dobromirov D., Šenk V.: Maximizing the Profit of Telecom Tel Electronics and electrical engineering, 2011, Vol. 7, No 113, pp. 67-73, ISSN 1392-12  Bojović Ž., Šenk V., Dobromirov D., Bojović P.: Intervendor working of VOIP networks Telecommunications Professionals, 2011, Vol. 5, No 3, pp. 26-32, ISSN 1755-9278  mary data for teacher's scientific or art and professional activity: lation total:  141	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Process vol.11, no. 7, 2004, pp. 589-593.  D. Bajić, V. Šenk, M. Despotović, "Subsets of the STM-1 frame-alignment signal: a monitoring analysis", IEE Proc. 149, no. 5, Oct. 2002. pp. 242-248.  Miroslav Despotović, Vojin Šenk, Bartolomeu F. Uchôa Filho, "DISTANCE SPECTRA OF CONVOLUTIONAL COD PARTIAL-RESPONSE CHANNELS", IEEE Transactions on Communications, vol. 49, no.7, pp. 1121-1124, July 2 Kovačević M., Šenk V.: On Possible Dependence Structures of a Set of Random Variables, Acta Mathematica Hu Vol. 135, No 3, pp. 286-296  Bojović Ž., Perić Z., Delić V., Šećerov E., Sečujski M., Šenk V.: "Comparative Analysis of the Performance of Diffe a live VoIP network using SIP protocol", Electronics and electrical engineering, 2012, Vol. 117, No 1, pp. 37-42, IS Bojović Ž., Šećerov E., Dobromirov D., Šenk V.: Maximizing the Profit of Telecom Telcos by a Novel Traffic Schec Electronics and electrical engineering, 2011, Vol. 7, No 113, pp. 67-73, ISSN 1392-1215  Bojović Ž., Šenk V., Dobromirov D., Bojović P.: Intervendor working of VOIP networks , Journal of the Institute of Telecommunications Professionals, 2011, Vol. 5, No 3, pp. 26-32, ISSN 1755-9278  mmary data for teacher's scientific or art and professional activity:  lation total: 141				



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Švenda S. Goran				
Academic title:					Associate Professor				
	e of the insting date:	titution v	vhere the te	eacher works full time and	-				
	Scientific or art field:					etics			
Acad	Academic carieer Year Institution						Field		
Acad	lemic title el	lection:	2012	Faculty of Technical Sci	ences - Novi S	ad	Electroenergetics		
PhD	thesis		2001	School of Electrical Eng			Electroenergetics		
Magi	ster thesis		1994	School of Electrical Engi			Electroenergetics		
	elor's thesis	s	1988	Faculty of Technical Sci			Electroenergetics		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	EE401	Applica	ation of Cor	mputers in Power Systems	s 1		er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	ESI003	Electri	c power sof	tware development		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
3.	ESI043	Optimi	zation Meth	nods in Power Engineering	g	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies		
4.	SEI002	Archite	ecture of Dis	stributed Systems in Powe	er Systems	Academic			
5.	DE207S	Prelaz	ni procesi i	stabilnost u EES			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
6.	DE216S	Comp	utational Int	elligence in Power Systen	ns		E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
7.	EE501	Numerika i algoritmi				( M30) Ene Studies	ergy and Process Engineering, Master Academic		
8.	EE506	Analysis of PES 3					er, Electronic and Telecommunication g, Master Academic Studies		
9.	EE560	Planira	anje elektro	energetskih sistema			er, Electronic and Telecommunication g, Master Academic Studies		
10.	DE105S	Optimi	zation Meth	nods in Power Engineering	g - II		ver, Electronic and Telecommunication g, Specialised Academic Studies		
11.	DE217S	PES A	nalysis 4			( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies			
12.	EE0501	Optimi	zation Meth	nods in Power Systems - 1	1	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies			
13.	EE0516	Specia	ilized Softw	are in Power Systems		Studies	wer Software Engineering, Master Academic		
							er, Electronic and Telecommunication g, Master Academic Studies		
14.	DE216	Comp	utational Int	elligence in Power Systen	ns	( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
15.	DE105	Optimi	zation Meth	nods in Power Engineering	g - II		ver, Electronic and Telecommunication g, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					
1.				vić M., Švenda G.: An Op SBN 978-3-642-15575-8	otimal Relations	ship-Based	Partitioning of Large Datasets, LNCS, Springer		
2.			ndić Z., Str 142-0615	ezoski V.: Advanced Volt	age Control Int	egrated in D	DMS, INT J ELEC POWER, 2012, Vol. 43, pp.		
3.	Delivery,	2002, V	′ol. 17, No 4	1, pp. 1023-1029			rounding System Analysis, IEEE Trans. on Power		
4.	Čapko D. Systems,	, Erdelja Electro	an A., Šven nics and ele	da G., Popović M.: A Dyr ectrical engineering, 2012	namic Repartition, Vol. 5, No 12	oning of Lar 1, pp. 1392-	ge Data Model in Distribution Management 1215, ISSN 1392-1215		
5.				kut D., Švenda G.: DMS nal Science, 2012, Vol. 1,			reen Distributed Generation Penetration in 0354-9836		
6.							Large Datasets in Utility Management Systems, 4, pp. 41-46, ISSN 1582-7445		

# TAS STUDIO

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Representative refferences (minimum 5, not more than 10)								
7.	Strezoski V., Švenda G., Bekut D.: Extension of the Canonical Model Application for Calculation on Power Systems Under Fault Conditions, Electrical Power							
8.	Nahman J., Švenda G.: Power and Earthing System Modeling in Natural Coordinates, Electrical Power							
9.	Bekut D., Švenda G., Strezoski V.: Dead Zone Phenomenon in Distance Relaying of Overhead Transmission Lines, Electrical Power System Research, 2000, No 56, pp. 1-8							
10.	Nahman J., G. Svenda: Power and Earthing S ELSEVIER, 2002, No.24, pp. 541-549, ISSN 0		ural Coordinates	, Electrical Power And Energ	y Systems,			
Sur	mmary data for teacher's scientific or art and prof	essional activity:						
Quot	Quotation total: 5							
Total	Total of SCI(SSCI) list papers: 8							
Curre	Current projects : Domestic : 6 International : 14							

# FACULTY OF TEC

## UNIVERSITY OF NOVI SAD

## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Teofanov Đ. Ljiljana			
	Academic title:				Assistant Professor			
Nam	l ———					Faculty of Technical Sciences - Novi Sad		
					18.12.1995			
	ntific or art f				Mathematics			
Acad	demic caries	er	Year	Institution			Field	
Acad	demic title e	lection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Mathematics	
PhD	thesis		2008	Faculty of Sciences - No			Mathematical Sciences	
<del></del>	ister thesis		2000	Faculty of Sciences - No			Mathematical Sciences	
Bach	nelor's thesis	S	1994	Faculty of Sciences - No	ovi Sad		Mathematical Sciences	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	gramme name, study type	
1.	A101	Mathe	matics			( A00) Arch	nitecture, Undergraduate Academic Studies	
							asurement and Control Engineering,	
2.	EE204	Select	ed Chapters	s in Mathematics		_	uate Academic Studies	
			-				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	GG00	Mathe	matical Met	hods 1		+	l Engineering, Undergraduate Academic Studies	
4.	GI101	Algebr	a			( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
5.	IAM001	Mathe	matical Sha	pe Modeling for Compute	r Animation	( F10) Eng Studies	ineering Animation, Undergraduate Academic	
						( M20) Med Undergrad	chanization and Construction Engineering, uate Academic Studies	
	M102	2 Mathematics 1				( M30) Ene	ergy and Process Engineering, Undergraduate Studies	
6.							chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
_	M106	Matha	matica 2			<ul><li>( M30) Energy and Process Engineering, Undergraduate Academic Studies</li><li>( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies</li></ul>		
7.	M106	Maure	matics 2					
						( P00) Production Engineering, Undergraduate Academic Studies		
8.	E101A	Discre	te Mathema	atics			ver, Electronic and Telecommunication g, Undergraduate Academic Studies	
9.	IM1523	Discro	te Mathema	atics		( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
9.	11011323	DISCIE	manicilia			(I20) Engin Studies	neering Management, Undergraduate Academic	
10.	P216	Numer	rical Analys	is		( P00) Prod Studies	duction Engineering, Undergraduate Academic	
11	SE0009	Dicara	te Mathema	ntice			tware Engineering and Information Technologies, uate Academic Studies	
11.	350009	Discie	te iviatileina	au03			tware Engineering and Information Technologies - ndergraduate Academic Studies	
							ver, Electronic and Telecommunication g, Specialised Academic Studies	
						( I12) Indus	strial Engineering, Specialised Academic Studies	
12.	DZ01MS	Select	ed Chapters	s in Mathematics		( I22) Engii Studies	neering Management, Specialised Academic	
						( Z00) Environmental Engineering, Specialised Academic Studies		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes									
LISU	or courses b	eing held by the teacher in the accret	nted study programme	5					
	ID	Course name		Study programme name, study type					
13.	IA022	Numerical Optimization		( F20) Engineering Animation, Master Academic Studies					
14.	D0M48	Numerical Methods for Solving Diffe	rential Equations	( OM1) Mathematics in Engineering, Doctoral Academic Studies					
				( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies					
				( E20) Computing and Control Engineering, Doctoral Academic Studies					
				( F00) Graphic Engineering and Design, Doctoral Academic Studies					
				( F20) Engineering Animation, Doctoral Academic Studies					
				( G00) Civil Engineering, Doctoral Academic Studies					
( GI0) Geodesy and		( GI0) Geodesy and Geomatics, Doctoral Academic Studies							
15.	DZ01M	Selected Chapters in Mathematics		( H00) Mechatronics, Doctoral Academic Studies					
15.	DZUTIVI	Selected Chapters in Mathematics		( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies					
				( M00) Mechanical Engineering, Doctoral Academic Studies					
				( M40) Technical Mechanics, Doctoral Academic Studies					
				( OM1) Mathematics in Engineering, Doctoral Academic Studies					
				(S00) Traffic Engineering, Doctoral Academic Studies					
				( Z00) Environmental Engineering, Doctoral Academic Studies					
				( Z01) Safety at Work, Doctoral Academic Studies					
Rep	oresentative	refferences (minimum 5, not more th	an 10)						
1.		Teofanov, Lj., Uzelac, A Robust Lay //athematics and Computation,(2009),		ollocation Method for a Convection-Diffusion Problem,					
2.		, Lj., Roos, HG, An elliptic singularly Appl. Math. Vol. 212, 2008, 374-389	y perturbed problem w	ith two parameters II: robust finite element solution, J.					
3.		r, Lj., Roos, HG, An elliptic singularly th. Vol. 206, 2007, 1082-1097	y perturbed problem w	ith two parameters I: solution decomposition, J. Comput.					
4.		Uzelac, Z., Teofanov, Lj., The discret Math. Comput. Simul. 2009, Vol. 79,		or quadratic spline discretization of a singularly perturbed					
5.		, Lj., Zarin, H., Superconvergence for 09, 743-765	two-parameter singula	arly perturbed problem, BIT Numerical Mathematics, Vol. 49,					
6.		5, R., Teofanov, Lj., A uniform numerio Ilgor. 54, 2010, 431-444	cal method for semiline	ear reaction-difusion problems with a boundary turning point,					
7.		y, Lj., Uzelac, Z., Family of Quadratic ol. 84, No. 1, 2007, 33-50	Spline Difference Scho	emes for a Convection-Diffusion Problem, Int. J. Comput.					
8.		Uzelac, Z., Teofanov, Lj., On colloca ath, Vol. 31, No. 1, 2001, 125-132	tion methods for singu	lar perturbation problems of convection-diffusion type, Novi					
9.	Surla, K., 2000, 17		ion methods for singul	ar perturbation problems, Novi Sad J. Math., Vol. 30, No. 3,					
10.	Čomić, I.	, Pavlović, Lj., Funkcije više promenlji	vih, Fakultet tehničkih	nauka, Novi Sad, 2000, 95 str.					
Sur	nmary data	for teacher's scientific or art and profe	essional activity:						
Quot	ation total:		12						
		CI) list papers :	7						
Curre	ent projects	:	Domestic :	1 International : 0					



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Nam	Name and last name:			Teslić Đ. Nikola			
	lemic title:				Full Professo		
		itution v	vhere the te	eacher works full time and	-		
	ng date:						
	ntific or art f		Year	Institution	Computer Engineering and Computer Communication  Field		
Acac	lerriic cariee	1		mstitution			Computer Engineering and Computer
Acad	lemic title el	ection:	2011				Communication
PhD	thesis		1999	Faculty of Technical Sci			Computer Engineering
Ť	ster thesis		1997	Faculty of Technical Sci			Computer Engineering
	elor's thesis		1995	Faculty of Technical Sci			Computer Engineering
List	of courses b	eing ne	ld by the te	acher in the accredited stu	udy programme	es I	
	ID	Course	e name			Study pro	ogramme name, study type
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies
						( ES0) Pov Academic	wer Software Engineering, Undergraduate Studies
1.	E227A	Logic Design of Computer Systems 1					easurement and Control Engineering, luate Academic Studies
							er, Electronic and Telecommunication ng, Undergraduate Academic Studies
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies
2.	E244	Select	Selected Chapters in Physical Architecture				easurement and Control Engineering, luate Academic Studies
							er, Electronic and Telecommunication ng, Undergraduate Academic Studies
					( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
		Television and Image Processing Software				( MR0) Me Undergrad	easurement and Control Engineering, luate Academic Studies
3.	RT50				1	( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies	
						( SEL) Sof Loznica, U	tware Engineering and Information Technologies - Indergraduate Academic Studies
							er, Electronic and Telecommunication ng, Undergraduate Academic Studies
4.	EK465	Archite	ectures of d	igital signal processors			er, Electronic and Telecommunication ng, Undergraduate Academic Studies
5.	SERT02	Basics	of compute	er engineering			tware Engineering and Information Technologies, luate Academic Studies
	DTFO	Toloud	nion on differ	ogo Droopeia a Caffee	2	( E20) Con Academic	nputing and Control Engineering, Master Studies
6.	RT56	i elevis	51011 and 1M	age Processing Software		( SE0) Sof Master Aca	tware Engineering and Information Technologies, ademic Studies
7	DTE44	Practio	cum in com	puter engineering and con	nputer	( E20) Con Academic	mputing and Control Engineering, Master Studies
7.	RT511		unications				tware Engineering and Information Technologies, ademic Studies
8. DRT04 Selected Chapters in Computer Communic			ations	( Z01) Safe	ety at Work, Doctoral Academic Studies		
9.	DRT04 Selected Chapters in television software			s in television software		( E20) Con Academic	nputing and Control Engineering, Doctoral Studies
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)			
1.	Arhitektu	re i algo	ritmi DSP 1	, Vladimir Kovačević, Miro	oslav Popović,	Miodrag Tei	merinac, Nikola Teslić
2.			adataka iz lo Kovačević	ogičkog projektovanja. rač	unarskih sister	na I : projek	tovanje digitalnih sistema. Mihajlo Katona, Nikola



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES Power

Power, Electronic and Telecommunication Engineering



I/C	presentative renerences (minimum 5, not more til	all 10)							
3.	Z. Šarić, S. Jovičić, V. Kovačević, N.Teslić, D. MICROPHONE ARRAY, filled 21.november, 2	• •		OR SPEAKER LOCALIZATIO	ON USING				
4.	D. Kukolj , V. Kovačević, N.Teslić, I. Papp, TECHNIQUE FOR DIRECTION OF ARRIVAL ESTIMATION FROM SOUND SOURCE USING DUAL MICROPHONE SYSTEM, filled 3.november, 2006, No. P-2006/0612.								
5.	Z. Šaric, S. Jovičić, V. Kovačević, N.Teslić, I. F USING MICROPHONE ARRAY, filled 3.novem			AUTOMATIC GAIN CONTR	ROL (AGC)				
6.	Majstorović D., Čelanović I., Teslić N., Čelanović N., Katić V.: Ultra-Low Letency Hardware-in-the-Loop Platform for Rapid Validation of Power Electronics Designs, IEEE Transaction on Industrial Electronics, 2011, Vol. 58, No 10, pp. 4708-4716, ISSN 0278-0046, UDK: http://dx.doi.org/10.1109/TIE.2011.2112318								
7.	Pap I., Šarić Z., Jovičić S., Teslić N.: Adaptive microphone array for unknown desired speaker's transfer function, JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, 2007, Vol. 122, No 2, pp. 44-49, ISSN 10.1121/1.2749077, UDK: http://dx.doi.org/10.1121/1.2749077								
8.	Katona M., Kaštelan I., Peković V., Teslić N., T line, IEEE Transactions on Consumer Electron 10.1109/TCE.2011.5735506				final production				
9.	Pap I., Šarić Z., Teslić N.: Hands-free Voice C No 2, pp. 606-614, ISSN 0098-3063, UDK: doi		,	ons on Consumer Electronics	s, 2011, Vol. 57,				
10.	Marijan D., Zlokolica V., Teslić N., Peković V., Teckan T.: Automatic Functional TV Set Failure Detection System, IEEE Transactions on Consumer Electronics, 2010, Vol. 56, No 1, pp. 125-133, ISSN 0098-3063, UDK: 10.1109/TCE.2010.5439135								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	Quotation total : 0								
Tota	l of SCI(SSCI) list papers :	6							
Curr	Current projects : Domestic : 2 International : 10								



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



## Science, arts and professional qualifications

Name and last name:					Tomić J. Josif				
<b>—</b>	lemic title:				Assistant Professor				
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				01.09.1995				
	ntific or art f				Electrical Mea	asurements			
Acad	lemic caries	er	Year	Institution		Field			
Acad	lemic title el	lection:	2008	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
PhD	thesis		2007	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
	ster thesis		2004	Faculty of Technical Sci			Electrical Measurements		
Bach	elor's thesis	S	1990	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
List	of courses b	eing he	ld by the tea	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
1.	E130A	Electri	cal Measure	ements			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	EK301	Measu	rement Sys	stems in Telecommunicati	ons		er, Electronic and Telecommunication g, Undergraduate Academic Studies		
3.	EOS10	Labora	atory of elec	ctrical measurement			ver Engineering - Renewble Sources of Electrical ndergraduate Professional Studies		
4.	EIEEM	Electri	cal and elec	ctronic measurements		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
5.	EIEEMI	Electri	cal and elec	ctronic measurements in i	ndustry		MR0) Measurement and Control Engineering, ndergraduate Academic Studies		
6.	EIEKI	Electronic Components in Instrumentation				(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
7.	EIPR1	Laboratory practicum					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
8.	EIVI	Virtual measurement systems					er, Electronic and Telecommunication g, Undergraduate Academic Studies		
9.	EM456	Compi	uters in the	supervisory and control s	ystems		er, Electronic and Telecommunication g, Undergraduate Academic Studies		
10.	ETI28	Indust	rial Electron	nics		( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
11.	ETI38	Optoe	lectronics fo	or communication and sen	nsors	( E02) Elec Profession	ctronics and Telecommunications, Undergraduate al Studies		
12.	MR0UL R	Introdu	uction to lab	oratory practice			asurement and Control Engineering, uate Academic Studies		
13.	DE503S	Indust	rial Electron	nics		, ,	ver, Electronic and Telecommunication g, Specialised Academic Studies		
14.	SI048	Measu	rement Sys	stems in the Field of Biom	edicine		ver, Electronic and Telecommunication g, Specialised Professional Studies		
15.	BMIM5A	Virtual	measurem	ent instrumentation in bior	medicine	(BM0) Bio	medical Engineering, Master Academic Studies		
16.	DE117S	Select	ed chapters	from optoelectronics sen	sors systems		ver, Electronic and Telecommunication g, Specialised Academic Studies		
17.	DE315S	Optoe	lectronics s	ensors systems-advanced	d course		ver, Electronic and Telecommunication g, Specialised Academic Studies		
18.	DE418S	Design	n of comple	x optoelectronics systems	3		ver, Electronic and Telecommunication g, Specialised Academic Studies		
10	EIDNU	Super	visory Conti	rol and Data Acquisition S	systems	( MR0) Me Academic	asurement and Control Engineering, Master Studies		
19.	FIDINU	Desigr		·			er, Electronic and Telecommunication g, Master Academic Studies		
20.	EIMRV1	Dool T	ime Measu	romonte		( MR0) Measurement and Control Engineering, Master Academic Studies			
20.	LIIVIRV	NEGI I	iiiic ivieasu	<u></u>			er, Electronic and Telecommunication g, Master Academic Studies		
21.	EIORM	Measu	irement and	Data Processing			er, Electronic and Telecommunication g, Master Academic Studies		



## FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

# Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes										
	ID	Course name		Study program	me name, study type					
22.	EM520	Industrial networks and protocols			ectronic and Telecommunica ster Academic Studies	ition				
23.	EM532	Design of electronic devices.  (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies								
24.	DE503	Industrial Electronics  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (M40) Technical Mechanics, Doctoral Academic Studies								
25.	DE117	Selected chapters from optoelectron	ics sensors systems		ectronic and Telecommunicatoral Academic Studies	ation				
26.	DE315	Optoelectronics sensors systems-ad	lvanced course		ectronic and Telecommunicatoral Academic Studies	ation				
27.	DE418	Design of complex optoelectronics s	ystems		ectronic and Telecommunicatoral Academic Studies	ation				
Rep	oresentative	e refferences (minimum 5, not more th	an 10)							
1.		, Kušljević M., Tomić J.: Power Comp cy Deviations, IEEE Transactions on In								
2.	J. Tomić, M. Kušljević, D. Marčetić, An Adaptive Resonator Based Method for Power Measurements According to the IEEE Trial- Use Standard 1459-2000, IEEE Transactions on Instrumentation & Measurement, Vol. 59, No. 2, pp. 250-258, February 2010.									
3.	M. Kušljević, J. Tomić, Lj. Jovanović, Frequency Estimation of Three-Phase Power System Using Weighted-Least-Square									
4.		Kušljević M., Vujičić V.: A New Pow I. 22, No 2, pp. 772-780	er System Digital Harr	monic Analyzer ,	IEEE Transactions on Powe	er Delivery,				
5.		vič, J. Tomić, D. Marčetić, Active pow s and wide-range frequency deviation er 2008.								
6.		tić, J. Tomić, M. Kušljević, Unbalance Voltage Sequence, IET Science, Meas				ethod and				
7.	LabVIEW communi	Stupar D., Tomić J., Slankamenac M., / Software Package and Low-Cost We cation technology, electronics and mic Croatian Society, 21-25 Maj, 2012, pp.	eb Camera, 35. MIPRO croelectronics - Savjet	D - İnternational o ovanje o mikrorad	onvention on information and	ď				
8.		Slankamenac M., Kušljević M., Živan onal Power Electronics	ov M.: A Virtual Labo	ratory for Teachin	g Frequency Estimation Tec	hniques, 15.				
9.		., Bajić J., Slankamenac M., Živanov M nent sensor, 16. International Sympos 355-5								
10.	wave atte	., Bajić J., Slankamenac M., Tomić J., enuation in liquids, 3. Research Peopl " Univeristy of Rousse 8, Studentska S	e and Actual Tasks on	Multidisciplinary	Sciences, Lozenec: Printing	house "Angel				
		for teacher's scientific or art and profe	,							
	ation total :		46							
		CI) list papers :	6 Demostis	2	International					
Curre	Current projects : Domestic : 2 International : 0									



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Academic Bits  Name of the institution where the teacher works full time and Faculty of Technical Sciences - Novi Sad starting date:  Scientific or art field:  Academic caterial or art field:  Course name  Define Course name  Study programme name, study type  ((BMO) Biomedical Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies  Academic Studies  (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunication Engineering Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies  (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies  (E10) Power, Electronic and Telecomm	Nam	e and last n	ame.			Trpovski V. Ž	elien		
Name of the institution where the teacher works full time and facturing date:  Scientific or ant field:  Scientific or ant field:  Academic carleer  Year  Institution  Field  Academic carleer  Year  Academic carleer  Year  Institution  Field  Academic carleer  Year  Institution  Field  Academic title lection:  1998  Faculty of Technical Sciences - Novi Sad  Telecommunications and Signal Processing  PhD thesis  1998  Faculty of Technical Sciences - Novi Sad  Telecommunications and Signal Processing  Magister thesis  1991  School of Electrical Engineering - Beograd  Telecommunications and Signal Processing  Bachelor's thesis  1981  Faculty of Technical Sciences - Novi Sad  Telecommunications and Signal Processing  Bachelor's thesis  1981  Telecommunications and Signal Processing  Bachelor's thesis  1981  Telecommunications and Signal Processing  Bachelor's thesis  1981  Telecommunications and Signal Processing  Telecommunications and Signal Processing  Independent of Telecommunications  Independent of Te	-		anio.						
starting date:    Course carieer   Vear   Institution   Telecommunications and Signal Processing			titution v	vhere the te	eacher works full time and			nces - Novi Sad	
Academic carieer  Year Institution  Field  Academic title election: 2009 Feacuty of Technical Sciences - Novi Sad Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electrical Engineering - Beograd Telecommunications and Signal Processing  Magister thesis 1991 School of Electronic Engineering - Study Processing  Magister thesis 1991 School of Electronic Engineering - Study Processing  Magister thesis 1991 School of Electronic Engineering - Study Processing  Magister Electronic and Telecommunications, Undergradual Electronic Engineering - Magister Electronic and Telecommunications, Undergradual Electronic Engineering - Magister Electronic and Telecommunications, Undergradual Electronic Engineering - Specialised Academic Studies  Magister Electronic and Telecommunication - Engineering - Specialised Academic Studies  Magister Electronic and Telecommunication - Engineering - Specialised Academic Studies  Magister Electronic and Telecommunication - Engineering - Doctoral Academic Studies  Magister - Magister Academic Studies  Magister - Magister - Magister -			atation v	VIIO10 1110 10	adridi Worko fall tillo aria				
Academic title election: 2009   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing PhD thesis   1998   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing Bachelor's thesis   1991   School of Electical Engineering: Beograd   Telecommunications and Signal Processing Bachelor's thesis   1981   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing Bachelor's thesis   1981   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing    List of courses being held by the teacher in the accredited study programmes   Study programme name, study type   (BMO) Biomedical Engineering, Undergraduate Academic Studies (E10) Power, Electronic and Telecommunication   (E10) Power, Electronic and Telecommunications, Undergraduate Academic Studies   (E02) Electronics and Telecommunications, Undergraduate Academic Studies   (E11) Power, Electronic and Telecommunications, Undergraduate Academic Studies   (E11) Power, Electronic and Telecommunication   (E11) Power, Electroni	Scier	ntific or art f	ield:			Telecommuni	cations and	Signal Processing	
PhD thesis   1998   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing Magister thesis   1991   School of Electrical Engineering - Beograd   Telecommunications and Signal Processing Bachelor's thesis   1991   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing   Ust of courses being held by the teacher in the accredited study programmes	Acad	lemic carie	er	Year	Institution			Field	
Magister thesis   1991   School of Electrical Engineering - Beograd   Telecommunications and Signal Processing Bachelor's thesis   1981   Faculty of Technical Sciences - Novi Sad   Telecommunications and Signal Processing	Acad	lemic title e	lection:	2009	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
Bachelor's thesis	PhD	thesis		1998	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
List of courses being held by the teacher in the accredited study programmes    ID   Course name	Magi	ster thesis		1991	School of Electrical Engi	ineering - Beog	ırad	Telecommunications and Signal Processing	
Introduction to Information Theory	Bach	elor's thesi	S	1981	Faculty of Technical Sci	ences - Novi S	ad	Telecommunications and Signal Processing	
Lexis   Lexi	List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
1. EK310 Introduction to Information Theory  EK310   Introduction to Information Theory  EK310   Optical Communications		ID	Course	e name			Study pro	ogramme name, study type	
Engineering, Undergraduate Academic Studies  2. EK435 Optical Communications  3. EK201 Signals and Systems  (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  4. EK451 Audio and Video Technologies  5. ET108 Telecommunication systems and signals  6. S1215P Analysis of Telecommunication signals  7. S1220P Analysis of Telecommunication Systems  8. DE110S Stochastic Processes in Telecommunications  9. DE412S Digital image processing algorithms  10. E15001 Modern technologies in electrical engineering  11. EK521 Information and Communication Theory  12. DE110 Stochastic Processes in Telecommunications  13. DE412 Digital Image Processing Algorithms  14. EK521 Digital Image Processing Algorithms  15. E1600 Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  (S01) Postal Traffic and Telecommunication Engineering, Specialised Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  (S01) Postal Traffic and Telecommunication Engineering, Specialised Academic Studies  (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  (S01) Postal Traffic and Telecommunication Engineering, Specialised Academic Studies  (S01) Postal Traffic and Telecommunication Engineering, Specialised Academic Studies  (S01) Power, Electronic and Telecommunication Engineering, Master Academic Studies  (S01) Power, Electronic and Telecommunication Engineering, Master Academic Studies  (S01) Power, Electronic and Telecommunication Engineering, Dectoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic Studies  2. Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike  3. Z.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, Novem	1.	EK310	Introdu	uction to Inf	ormation Theory		Studies		
2. EA439 Optical communications Undergraduate Academic Studies  3. EK201 Signals and Systems (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  4. EK451 Audio and Video Technologies (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies  5. ET108 Telecommunication systems and signals (E02) Electronics and Telecommunications, Undergraduat Professional Studies  6. S1215P Analysis of Telecommunication signals (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies  7. S1220P Analysis of Telecommunication Systems (S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies  8. DE110S Stochastic Processes in Telecommunications (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  9. DE412S Digital image processing algorithms (E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  10. E1SO01 Modern technologies in electrical engineering (E00) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  11. EK521 Information and Communication Theory (E00) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies  12. DE110 Stochastic Processes in Telecommunications  13. DE412 Digital Image Processing Algorithms (E10) Power, Electronic and Telecommunication Engineering, Dectoral Academic Studies  14. (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  15. (OM1) Mathematics in Engineering, Doctoral Academic Studies  16. (D1) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  17. (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  18. (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  19. (OM1) Mathematics in Engineering, Doctoral Academic Studies  10. E1500 Digital Image Processing Algorithms (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic St									
Engineering, Undergraduate Academic Studies  ER451 Audio and Video Technologies  ER551 Telecommunication systems and signals  ER562 FET108 Telecommunication systems and signals  ER572 Analysis of Telecommunication signals  ER572 Analysis of Telecommunication signals  Telecommunication systems  ER572 Analysis of Telecommunication Systems  ER572 Information and Telecommunications  ER572 Information and Telecommunication Engineering, Specialised Academic Studies  ER573 Information and Communication Theory  ER574 Information and Communication Theory  ER575 Information and Communication Theory  ER575 Information and Communication Theory  ER576 Information and Communication Theory  ER577 Information and Communication Theory  ER578 Information and Telecommunication Engineering, Specialised Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (Information and Communication Theory  ER578 Information and Telecommunication Engineering, Doctoral Academic Studies  (Information and Communication Theory  ER579 Information and Telecommunication Engineering, Doctoral Academic Studies  (Information and Telecommunication Engineering, Doctoral Academic Studies  (Information and Telecommunication Eng	2.	EK435	Optica	l Communi	cations		Ùndergrad	uate Academic Studies	
Engineering, Undergraduate Academic Studies  Engineering, Specialised Professional Studies  Engineering, Specialised Professional Studies  Engineering, Specialised Professional Studies  Engineering, Specialised Professional Studies  Engineering, Doctoral Academic Studies  Engineering, Engineering, Engineering  Engineering, Engineering	3.	EK201	Signal	s and Syste	ems				
5. E1108 Telecommunication systems and signals  6. S1215P Analysis of Telecommunication signals  7. S1220P Analysis of Telecommunication Systems  8. DE110S Stochastic Processes in Telecommunications  9. DE412S Digital image processing algorithms  10. E1S001 Modern technologies in electrical engineering  11. EK521 Information and Communication Theory  12. DE110 Stochastic Processes in Telecommunications  13. DE412 Digital Image Processing Algorithms  14. DE412 Digital Image Processing Algorithms  15. EVEX21 Information and Communication Theory  16. E1S001 Modern technologies in electrical engineering  17. EK521 Information and Communication Theory  18. DE412 Digital Image Processes in Telecommunications  19. DE410 Stochastic Processes in Telecommunication Engineering, Specialised Academic Studies  10. EVEX21 Information and Communication Theory  11. EK521 Information and Communication Theory  12. DE110 Stochastic Processes in Telecommunications  13. DE412 Digital Image Processing Algorithms  14. DE412 Digital Image Processing Algorithms  15. DE412 Digital Image Processing Algorithms  16. E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (E110) Power, Electronic and Telecommunication Engineering, Doctoral Academ	4.	EK451	Audio and Video Technologies						
The strain of the communication signals and support of the communication signals are supported by the strain of the communication signals are supported by the strain of t	5.	ETI08	Telecommunication systems and signals						
S122P   Analysis of Telecommunication Systems   Undergraduate Academic Studies	6.	S1215P	Analysis of Telecommunication signals						
BETTOS   Stochastic Processes in Telecommunications   Engineering, Specialised Academic Studies	7.	S1220P	Analysis of Telecommunication Systems						
10. E1SO01 Modern technologies in electrical engineering (E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies  11. EK521 Information and Communication Theory (S01) Postal Traffic and Telecommunications, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (Uniformity et al., 1975)	8.	DE110S	Stocha	astic Proces	sses in Telecommunication	ns			
Engineering, Specialised Professional Studies	9.	DE412S	Digital	image prod	cessing algorithms				
11.	10.	E1SO01	Moder	n technolog	gies in electrical engineerii	ng			
Engineering, Master Academic Studies	11.	EK521	Inform	ation and C	Communication Theory		Academic	Studies	
12.   DE110   Stochastic Processes in Telecommunications   Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies (Image Processing Algorithms (Image Processing Algorithms)   Engineering, Doctoral Academic Studies (Image Processing Algorithms)							Engineering, Master Academic Studies		
Studies  (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic Studies  (OM1) Mathematics in Engineering, Doctoral Academic Studies  Representative refferences (minimum 5, not more than 10)  1. Ispitivanje statističkih osobina digitalnog prenosa u UKT FM radio difuziji primenom sistema RDS  2. Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike  3. Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.  4. Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.  5. Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEEE Electronics	12.	DE110	Stocha	astic Proces	sses in Telecommunication	ns	Èngineerin	g, Doctoral Academic Studies	
DE412   Digital Image Processing Algorithms   Engineering, Doctoral Academic Studies (OM1) Mathematics in Engineering, Doctoral Academic Studies							Studies	•	
Representative refferences (minimum 5, not more than 10)  1. Ispitivanje statističkih osobina digitalnog prenosa u UKT FM radio difuziji primenom sistema RDS  2. Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike  3. Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.  4. Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.  5. Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics	40	DE440	Dicital	Imaga Dra	oogging Algorithms				
<ol> <li>Ispitivanje statističkih osobina digitalnog prenosa u UKT FM radio difuziji primenom sistema RDS</li> <li>Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike</li> <li>Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.</li> <li>Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.</li> <li>Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics</li> </ol>	13.	DE412	Digital	image Pro	cessing Algorithms			thematics in Engineering, Doctoral Academic	
<ol> <li>Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike</li> <li>Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.</li> <li>Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.</li> <li>Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics</li> </ol>	Rep	oresentative	reffere	nces (minin	num 5, not more than 10)				
<ul> <li>Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.</li> <li>Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.</li> <li>Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics</li> </ul>	1.	Ispitivanj	e statisti	ičkih osobin	na digitalnog prenosa u Uk	KT FM radio dif	uziji primeno	om sistema RDS	
<ul> <li>Ž.Trpovski, "Reliability Testing Method for RDS Based on the PI Code Statistics", IEEE Trans. on Consumer Electronics, Vol.37, No.4, November 1991., pp. 884-891.</li> <li>Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.</li> <li>Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics</li> </ul>	2.	2. Uniformne i neuniformne filtar banke i njihova primena u kompresiji signala slike							
4. Ž.Trpovski, "Contribution to window design for modulated lapped transforms", Electronics Letters, Vo.33, No. 24, November 199 pp.2013-2014.  Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics		Ž.Trpovs	ki, "Relia	ability Testi	ng Method for RDS Based	<u> </u>		', IEEE Trans. on Consumer Electronics, Vol.37,	
Vesna Zeljković, A. Dorado, Ž. Trpovski, E. Izquierdo, "Classification of Building Images in Video Sequences", IEE Electronics	4.	Ž.Trpovs	ki, "Con			ited lapped tran	nsforms", El	ectronics Letters, Vo.33, No. 24, November 1997,	
	5.	Vesna Ze	eljković,				of Building	Images in Video Sequences", IEE Electronics	

## STOP OF STOP

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
6.	V. Crnojević, V. Šenk, Ž. Trpovski, "Advanced Impulse Detection Based on Pixel-Wise MAD", IEEE Signal Processing Letters, Vol.11, No. 7, July 2004, pp.589-592.								
7.	M.Temerinac, A.Kozarev, Z.Trpovski, B.Šimšić, An Efficient Image Compression Algorithm Based on Filter Bank Analysis and Fractal Theory, Proc. of EUSIPCO-92, Sixth European Signal Processing Conference, Brussels, Vol.III, pp.1373-1376.								
8.	J.Knezevic, V.Katic, Z.Trpovski, D.Graovac: "Modulated Lapped Transforms Filter Bank Technique Application For AC/DC Converter Power Quality Analysis", Power Quality Conference - PCIM-PQ 2000, Nuremberg (Germany), June 2000, published on CD-ROM.								
9.	T.Lončar-Turukalo, V.Crnojević, Ž.Trpovski, Im on Telecommunications in Modern Satelite, Ca				al Conference				
10.	V.Zeljković, Ž.Trpovski, V.Šenk, Improved Illun International Conference on Video-Image Proc								
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	14							
Tota	l of SCI(SSCI) list papers :	4							
Curr	ent projects :	Domestic :	1	International :	1				



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name:					Vasić V. Veran			
	emic title:				Full Professor			
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
starti	ng date:				01.04.1995			
Scier	ntific or art f	ield:			Power Electronics, Machines and Facilities			
Acad	emic carie	er	Year	Institution			Field	
Acad	emic title el	ection:	2011				Power Electronics, Machines and Facilities	
PhD	thesis		2001	School of Electrical Engi	neering - Beog	rad	Power Electronics, Machines and Facilities	
Magi	ster thesis		1996	School of Electrical Engi	neering - Beog	rad	Power Electronics, Machines and Facilities	
Bach	elor's thesis	3	1994	Faculty of Technical Sci	ences - Novi Sa	ad	Power Electronics, Machines and Facilities	
List o	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	:S		
	ID	Course	e name			Study pro	gramme name, study type	
						Undergrad	asurement and Control Engineering, uate Academic Studies	
1.	E133	Power	Converters	3		Academic		
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EE304	Electri	c Machines	1		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EE307	Electri	c Machines	2		Ùndergrad	asurement and Control Engineering, uate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	EE401	1 Electric Machines 3				Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
5.	EE520	Design of Electrical Machines and Converte			ers	Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies er, Electronic and Telecommunication	
						Èngineerin	g, Undergraduate Academic Studies ver Engineering - Renewble Sources of Electrical	
6.	EOS18	Industi	rial Protoco	ls and Network		Ènergy, Ur	ndergraduate Professional Studies	
7.	F203		cal Machine			Àcademic		
8.	H351	Electri	cal Machine	es			chatronics, Undergraduate Academic Studies	
9.	EE424A	Power	Electronic	in Drive and Industry		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		
10.	DE210S	Select	ed topics in	electrical machines		Èngineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
11.	EE520	Design	n of Electric	al Machines and Converte	ers	Èngineerin	er, Electronic and Telecommunication g, Master Academic Studies	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
12.	DE210		<u>'</u>	s in Electric Machinery		Èngineerin	ver, Electronic and Telecommunication g, Doctoral Academic Studies	
13.	DOM28			nulation of Driving Systems	S	( M00) Me	chanical Engineering, Doctoral Academic Studies	
Rep			`	num 5, not more than 10)				
1.	Power Ge Technolo	enerator gical De	" Journal of evelopment	f Applied Research and Te	echnology – JA	RT, Octobe	ed Sensorless Vector Control Method for Wind or 2012, Center for Applied Sciences and I, ISSN: 1665-6423, [Online]. Available:	
2.				., Vasić V.: Optimal fuzzy Computer Engineering, 20			O for induction motor speed control, Journal of 4, ISSN 1582-7445	
3.	Vasić V., Time Cor	Marčeti nstant Id	ć D., Jeften lentification	ić B., Vladan J.: Speed-S , IET ELECTR POWER A	ensorless Con PP, 2010, Vol.	trol of Induc 4, No 6, ISS	tion Motor Based on Reactive Power with Rotor SN 1751-8660	
4.				D.: Prediction of Local Instruction			uction Motor Drives, COMPEL - The international No 3, ISSN 0332-1649	

# TAS STUDIO POR STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
5.	Oros Đ., Vasić V., Marčetić D., Kulić F.: Influence of parameters detuning on induction motor NFO shaft-sensorless scheme, Journal of Advances in Electrical and Computer Engineering, 2010, Vol. 10, No 4, pp. 121-124, ISSN 1582-7445								
6.	Oros Đ., Vasić V., Marčetić D.: NFO sensorless induction motor drive with on-line stator resistance parameter update, Electric Power Components&Systems, 2008, Vol.36.No.12, pp.1318-1336.								
7.	Reljić D., Vasić V., Ostojić D., Dumnić B.: A Comparision of PI Current Controllers in Field Oriented Induction Motor Drive, Journal of Advances in Electrical and Computer Engineering, 2006, Vol. 6, No 2, pp. 46-51, ISSN 1582-7445								
8.	V. Vasić, S. Vukosavić, E. Levi, "A stator resistance estimation scheme for speed sensorless rotor flux oriented induction motor drives", IEEE Transaction on Energy conversion, vol. 18 no.4, pp. 476-483, december 2003.								
9.	V. Vasić, S. Vukosavić, "Sensorless MRAS Ba Estimation", European Transactions on Electric				ance				
10.	V. Vasić, S. Vukosavić, "Robust MRAS based Engineering Review, vol. 21 no.11, November		istance and rotor	speed identification", IEEE F	Power				
Su	mmary data for teacher's scientific or art and profe	essional activity:							
Quo	tation total :	73							
Tota	I of SCI(SSCI) list papers :	9							
Curr	ent projects :	Domestic :	3	International :	1				

## DE JE

#### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Nam	Name and last name:				Vidaković P. Milan			
_	lemic title:				Associate Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
starti	ng date:				20.01.1998			
Scie	ntific or art f	ield:			Applied Computer Science and Informatics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2009	Faculty of Technical Science	ences - Novi Sa	ad	Applied Computer Science and Informatics	
PhD	thesis		2003	Faculty of Technical Science	ences - Novi Sa	ad	Applied Computer Science and Informatics	
Magi	ster thesis		1998	Faculty of Technical Science			Applied Computer Science and Informatics	
Bach	elor's thesi	S	1995	Faculty of Technical Sci	ences - Novi S	ad	Applied Computer Science and Informatics	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	S		
	ID	Course	e name			Study pro	ogramme name, study type	
						Àcadémic		
1.	E239A	Web F	rogrammin	a		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
				9		Ùndergrad	asurement and Control Engineering, luate Academic Studies	
							er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
	E2K41	Distributed Artificial Intelligence and Intellig			ont Agonto	( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
2.		DISTID	uteu Artinci	ai iritelligence and iritelligi	eni Agenis	( SE0) Software Engineering and Information Techr Undergraduate Academic Studies		
							tware Engineering and Information Technologies - Indergraduate Academic Studies	
3.	F501	WEB [	Desian			( F00) Grap Academic	phic Engineering and Design, Undergraduate Studies	
0.	1 001	WEBI				( F10) Eng Studies	ineering Animation, Undergraduate Academic	
4.	Gl211	Geoinf	formatics			( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
5.	GI111	Inform	ation techno	ologies in geodesy		( GI0) Geodesy and Geomatics, Undergraduate Academic Studies		
6.	SE0006	Ohioat	oriented pr	ogramming 1			tware Engineering and Information Technologies, luate Academic Studies	
0.	320000	Object	. Onented pr	ogramming 1		( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
7.	SE239A	Web p	rogramming	9			tware Engineering and Information Technologies, luate Academic Studies	
							tware Engineering and Information Technologies - Indergraduate Academic Studies	
8.	E2501	Electro	onio Doves	nt Systems		( E20) Con Academic	nputing and Control Engineering, Master Studies	
0.	E2301	Electro	onic Payme	iii oysteiiis			tware Engineering and Information Technologies, ademic Studies	
	ED007	Deau	nont and so	ntont management		( I20) Engii Studies	neering Management, Specialised Professional	
9. EP007 Document		nent and content management				( IB0) Engineering Management - MBA, Specialised Professional Studies		
10.	AD0008	Web d	esign in Ard	chitecture			ital Techniques, Design and Production in re and Urban Planning, Master Academic Studies	



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study programme name, study type					
11.	DRNI03	Selected Topics in Internet-Based S	ystems	( E20) Computing and Control Engineering, Doctoral Academic Studies					
12.	DRNI05	Selected Topics in Software Standar	rdization and Quality	( E20) Computing and Control Engineering, Doctoral Academic Studies					
				(F20) Engineering Animation, Doctoral Academic Studies					
13.	FDS152	Selected Topics in Computer Graphi	ics	( F00) Graphic Engineering and Design, Doctoral Academic Studies					
14	DALI014	Salastad Tanica in Computing		( E20) Computing and Control Engineering, Doctoral Academic Studies					
14.	DAU014	Selected Topics in Computing		( OM1) Mathematics in Engineering, Doctoral Academic Studies					
45	DDNII40			( E20) Computing and Control Engineering, Doctoral Academic Studies					
15.	15. DRNI16	Selected Topics in Electronic Busine	ess	( OM1) Mathematics in Engineering, Doctoral Academic Studies					
16.	DRNI18	DRNI18 Selected Topics in Distributed/Mobile computing		( E20) Computing and Control Engineering, Doctoral Academic Studies					
	( F20) Engineering Animation, Doctoral Academic St								
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.		ć, M., Milosavljević, B., "Internationalis onal Unicode Conference, Orlando, US		rary Information System", Proceedings of the 28th 005.					
2.				nt Technology", Proceedings of the 8th IASTED International Cambridge, USA, November 9-11, 2004., pp. 489-493					
3.		ć M., Sladić G., Komazec S., "Sistemi za informacione tehnologije i multimed		nskim sadržajima i njihova promena u eUpravi", Info M: pp. 36-41, ISSN 1451-4397					
4.	System E		al Conference on Distr	ocessing Bibliographic Documents in the Library Inforation ibuted LibraryInformation Systems, Ohrid, Former Yugoslav					
5.	7th IAST	5, M., Sladić, G., Konjović, Z., "Securit ED International Conference on Softw , pp. 128-133.	y Management In J2E are Engineering and A	E Based Intelligent Agent Framework", Proceedings of the Applications (SEA 2003), Marina Del Rey, USA, November 3-					
6.		ević B., Vidaković M., Komazec S. and ed Data Models", In Software Enginee		er Interface Code Generation for Data-Intensive Systems with actice, Las Vegas, NV, USA, 2003.					
7.				k", Proceedings of the 6th IASTED International Conference JSA, November 4-6, 2002., pp. 343-348.					
8.	Vidakovid	ć M., "Agentska okruženja", Zadužbir	na Andrejević. Beograd	d, 2007, ISBN: 9-788672-446210					
9.	Milosavlje	ević B., Vidaković M., Java i Internet p	orogramiranje, FTN izd	avaštvo, 2007., ISBN 978-86-7892-047-9					
10.	Okanović Kopaonik		et servisa za ažuriranje	e verzija aplikacija", Zbornik radova YuInfo 2007 (CD),					
Sur	nmary data	for teacher's scientific or art and profe	essional activity:						
Quot	Quotation total: 119								
	Total of SCI(SSCI) list papers: 7								
Current projects : Domestic : 1 International : 0									



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Nam	Name and last name: Viden					/idenović-Mišić S. Mirjana		
Acad	demic title:				Assistant Pro	fessor		
1		itution v	vhere the te	acher works full time and	Faculty of Te	y of Technical Sciences - Novi Sad		
starti	ing date:				01.08.1998	}		
Scie	ntific or art f	ield:		ĺ	Electronics			
Acad	demic caries	er	Year	Institution			Field	
Acad	lemic title el	ection:	2010	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
PhD	thesis		2009	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
Magi	ister thesis		2003	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
Bach	nelor's thesis	3	1997	Faculty of Technical Sci	ences - Novi S	ad	Electronics	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	EM440	Comp	uter-Aided I	Electronic Circuit Design			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
2.	EM411A	Teleco	mmunication	on electronics		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EM424A	Comp	uter aided o	lesign of analogue integra	ted circuits	Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
4.	ETI09	Electro	onics			Profession		
5.	ETI30	Comp	uter-Aided I	Electronic Circuit Design		( E02) Electronics and Telecommunications, Undergraduate Professional Studies		
6.	ETI36	Telecommunication electronics				( E02) Electory ( E02) Profession	ctronics and Telecommunications, Undergraduate al Studies	
7.	EM516	Noise in Electronic Circuits					er, Electronic and Telecommunication g, Master Academic Studies	
8.	EM517	Modeling and Simulation of Semiconductor Components			Components		er, Electronic and Telecommunication g, Master Academic Studies	
9.	SI013	Applie	d electronic	s in industry			ver, Electronic and Telecommunication g, Specialised Professional Studies	
10.	SI035	Electro	onic Systen	ns in Oil Industry			ver, Electronic and Telecommunication g, Specialised Professional Studies	
11.	SI043	Compl	ex Digital S	system Design		( E00) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Professional Studies	
12.	SI044	Comp	uter-Aided I	Electronic Circuit Design			ver, Electronic and Telecommunication g, Specialised Professional Studies	
13.	DE402S		n areas of a design	analogue, digital and RF in	ntegrated	( E11) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies	
14.	EM510A	Advan circuits		ter aided design of microe	electronic	(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies		
15.	DE402		n areas of a design	analogue, digital and RF in	ntegrated		ver, Electronic and Telecommunication g, Doctoral Academic Studies	
Rep	presentative	reffere	nces (minin	num 5, not more than 10)				
1.	Effect of t	fluorinat	ion and hyd				ana Videnović-Mišić, M Pejović and K Y Tong: Si TFTs under gamma irradiation , Journal of	
2.		ences fo	,	•			depletion type MOSFET in linear region and Reliability, 2008, Vol. 48, No 7, pp. 1008-1014,	
3.		r, Inforn	nacije MIDI				xity Tunable 3-10 GHz IR-UWB Pulse ents and materials, 2012, Vol. 42, No 3, pp. 185-	
4.	Mišić M. Jevtić M. Nađ. I. "Low-frequency noise of a dual-gate MOSEET in linear region". Journal of Automatic Control Vol.							
5.	Impulse F	Radio U'	WB", ÍEEE		on Intelligent S	ystems and	wer 3.1-7.5 GHz Tunable Pulse Generator for Informatics – SISY, 20 – 22 September, 2012, 73-4748-8 (printed)	

## ASTAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
6.	Jelena Radic, Alena Djugova, Laszlo Nagy, Kalman Babkovic, Mirjana Videnovic–Misic, "Feedback Influence on Ring Oscillator Performance for IR-UWB Pulse Generator in 0.13µm CMOS technology", IEEE International Symposium – ELMAR-2012, 12 – 14 September, 2012, Zadar, Croatia, pp. 101 – 103, ISBN 978-953-7044-13-8 (ISSN 1334-2630)								
7.	Videnović-Mišić, M., Jevtić, M. M.,, "Modelling of dual-gate MOSFET 1/f noise in linear region",The International Conference on "Computer as a Tool" EUROCON 2007., pp.: 1987 – 1993, September 2007, ISBN:1-4244-0813-X								
8.	Jelena Radic, Alena Djugova, Laslo Nadj, Mirjana Videnovic–Misic, "Feedback Influence on Performance of Ring Oscillator for IR-UWB Pulse Generator in 0.18µm CMOS technology", IEEE 28th International Conference on Microelectronics - MIEL, 13 - 16 May, 2012, Niš, Serbia, pp. 357 – 360, ISBN 978-1-4673-0235-7 (Proceedings), 978-1-4673-0236-4								
9.	Alena Djugova, Jelena Radic, Mirjana Videnov International Semiconductor Conference - CA: 61284-171-7	· · · · · · · · · · · · · · · · · · ·							
10.	Videnović-Mišić, M., Jevtić, M. M., "Influence o Conference on Microelectronics, MIEL 2008., p		0		nternational				
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	ation total :	0							
Tota	Total of SCI(SSCI) list papers: 3								
Curre	ent projects :	Domestic :	2	International:	1				



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

I Nam	Name and last name:				Vujičić V. Vladimir			
	lemic title:				Full Professor			
Nam	e of the inst	titution v	vhere the te	acher works full time and	Faculty of Ted	chnical Scie	nces - Novi Sad	
starti	ng date:				01.09.1975			
Scie	ntific or art f	ield:			Electrical Mea	Electrical Measurements		
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	lection:	2002	Faculty of Technical Scient	ences - Novi Sa	ad	Electrical Measurements	
PhD	thesis		1992	Faculty of Technical Scient	ences - Novi S	ad	Electrical Measurements	
Magi	ster thesis		1983	Faculty of Technical Scient	ences - Novi Sa	ad	Automatic Control and System Engineering	
Bach	elor's thesi	S	1974	School of Electrical Engi	neering - Beog	ırad	Electrical and Computer Engineering	
List	of courses b	eing he	ld by the tea	acher in the accredited stu	ıdy programme	es		
	ID	Course	e name			Study pro	ogramme name, study type	
1.	E142	Measu	ıring Instrun	nents		Undergrad	asurement and Control Engineering, luate Academic Studies er, Electronic and Telecommunication	
							g, Undergraduate Academic Studies	
2.	EK301	Measu	rement Sys	stems in Telecommunication	ons		er, Electronic and Telecommunication g, Undergraduate Academic Studies	
3.	EIEEM	Electri	cal and elec	ctronic measurements		( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
4.	EIEEMI	Electrical and electronic measurements in i			ndustry		asurement and Control Engineering, luate Academic Studies	
5.	EIEMER	Electronic measurements					er, Electronic and Telecommunication g, Undergraduate Academic Studies	
6.	EIMMB M	Methods of measurement and measuremen systems in biomedicine			it-acquisition	Studies ( MR0) Me Undergrad	range and Control Engineering, luate Academic Studies	
						Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
7.	EIMNV	Measu	rements of	non-electrical quantities		Ùndergrad	easurement and Control Engineering, luate Academic Studies	
					(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies		g, Undergraduate Academic Studies	
8.	EIPDMS	Progra Syster		Measurement and Data Ac	quisition	Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
9.	EIPMS1			opment of industrial device	es and	Undergrad	asurement and Control Engineering, luate Academic Studies	
		measu	irement sys	tems 1		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
10.	EIPR1	Labora	atory praction	cum		Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
11.	EISMP	Senso	rs and trans	sducers		Undergrad	asurement and Control Engineering, luate Academic Studies	
						Èngineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
12.	EIVI	Virtual	measurem	ent systems		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies	
13.	MR0UL R	Introdu	uction to lab	oratory practice			asurement and Control Engineering, uate Academic Studies	
14.	DE103S	Measu	rement Sys	stems			ver, Electronic and Telecommunication g, Specialised Academic Studies	
15.	DE304S	Measurements in Telecommunications				( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
16.	DE404S	Intellig	ent Measur	ements		(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		

# STAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study program	me name, study type				
17.	SI018	lonizing and Non-lonizing Radiation	and Protection	, , ,	ectronic and Telecommunic ecialised Professional Studie				
18.	BMIM5D	Magnetic-Resonance Devices in Bio	medicine	( BM0) Biomedic	cal Engineering, Master Acad	demic Studies			
19.	EIDNU	Supervisory Control and Data Acqui	sition Systems	( MR0) Measurement and Control Engineering, M Academic Studies					
		Design			ectronic and Telecommunica ster Academic Studies	ation			
20.	EIORM	Measurement and Data Processing			ectronic and Telecommunica ster Academic Studies	ation			
21.	DE103	Measurement Systems			ectronic and Telecommunic ctoral Academic Studies	ation			
22.	DE304	Measurements in Telecommunication	ns		ectronic and Telecommunic ctoral Academic Studies	ation			
23.	DE404	Intelligent Measurements		, , ,	ectronic and Telecommunic ctoral Academic Studies	ation			
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.		Milovančev S., Vujičić V.: Digital Storment, IEEE Transactions on Instrume							
2.		3., Sokola M., Mitrović Z., Župunski I., -Noise Ratio, IEEE Transactions on Ir							
3.		Mitrović Z., Vujičić V.: Method for Har nts with InternallyGenerated Referenc 35-8871							
4.		ć, M.D.Kušljević, V.V.Vujičić: "A New F .772-780, April 2007.	Power System Digital I	Harmonic Analyze	er", IEEE Trans. on Power D	elivery, Vol. 22,			
5.	Radonjić	A., Vujičić V.: Integer Codes Correctin	ng Burst Errors Within	A Byte, IEEE Tra	nsactions on Computers, 20	11			
6.		A., Vujičić V.: Integer SEC-DED Code , pp. 518-520, ISSN 0020-0190	es for Low Power Com	munications, Info	rmation Processing Letters,	2009, Vol. 110,			
7.		"GENERALIZED LOW FREQUENCY pp.1089-1092, October 2001.	STOCHASTIC TRUE	RMS INSTRUM	ENT", IEEE Trans.Instrum.I	Meas., Vol.			
8.		ovančev, V. V. Vujičić, V. A. Katić: "Im verter", IEEE Trans. on Power Deliver				a New Adding			
9.	•	ski, L. Holiček, V. Vujičić, S. Milovanče 408-411, Apr. 1997.	ev: "POWER FACTOR	CALIBRATOR",	IEEE Trans. Instrum. Meas.,	vol. IM-46,			
10.		:, I. Župunski, S. Milovančev: "PREDE S, IEEE Trans. Instrum. Meas., vol. IN			ON ERROR IN DIGITAL ME	ASUREMENT			
Sur	nmary data	for teacher's scientific or art and profe	essional activity:						
Quot	Quotation total: 9								
Total	Total of SCI(SSCI) list papers: 18								
Curre	Current projects : Domestic : 1 International : 0								

## ASSTUDIO DE LA CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Nam	Name and last name:				Vukmirović M. Srđan			
Acad	emic title:				Assistant Professor			
1		titution v	vhere the te	eacher works full time and	,	chnical Scie	nces - Novi Sad	
<b>—</b>	ng date:				20.11.2000			
	ntific or art f				Automatic Co	ntrol and Sy	/stem Engineering	
Acad	emic carie	er	Year	Institution		Field		
-	emic title e	lection:	2012	Faculty of Technical Sci			Automatic Control and System Engineering	
	thesis		2011	Faculty of Technical Sci			Automatic Control and System Engineering	
Ť	ster thesis		2004	Faculty of Technical Sci			Automatic Control and System Engineering	
	elor's thesis	-	2000	Faculty of Technical Sci			Automatic Control and System Engineering	
List c	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	E126	Syster	n Control, N	Modeling and Simulation			er, Electronic and Telecommunication g, Undergraduate Academic Studies	
						(E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
						( ES0) Pow Academic	ver Software Engineering, Undergraduate Studies	
2.	E232	Syster	n Modelina	and Simulation			chnical Mechanics and Technical Design, uate Academic Studies	
	2202	System Modeling and Simulation					asurement and Control Engineering, uate Academic Studies	
							tware Engineering and Information Technologies, uate Academic Studies	
							tware Engineering and Information Technologies - ndergraduate Academic Studies	
3.	GI303A	Distributed Systems in Geomatics				( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
4.	H213	Syster	n Modelling	and Simulation 1		( GI0) Geo Studies	desy and Geomatics, Undergraduate Academic	
						, ,	chatronics, Undergraduate Academic Studies	
5.	E2312	Softwa	are design f	or SCADA systems		( E20) Con Academic	nputing and Control Engineering, Undergraduate Studies	
J.	LZOIZ	Oonwe	are design i	or coada systems		( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies		
6.	ESI004	Cloud	Computing	in power systems		( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
7.	ESI008	Develo	opment of C	Cloud application in power	systems	( ES0) Pov Academic	ver Software Engineering, Undergraduate Studies	
8.	SEAU02	SCAD	A Software				tware Engineering and Information Technologies, uate Academic Studies	
						( E20) Con Academic	nputing and Control Engineering, Master Studies	
9.	AU502	Distrib	uted Contro	ol Systems		( MR0) Me Academic	asurement and Control Engineering, Master Studies	
							er, Electronic and Telecommunication g, Master Academic Studies	
10.	H301	Syster	n Modeling	and Symulation		( H00) Med	chatronics, Master Academic Studies	
11.	E2533	Discre	te event sin	nulation		( E20) Con Academic	nputing and Control Engineering, Master Studies	
10	EGEGE	Softwa	are Algorithi	ms in Supervisory Control	and Data	( E20) Con Academic	nputing and Control Engineering, Master Studies	
12.	12. E2535 Software Algorithms in Supervisory Control and Data Acquisition Systems			(E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies				
13.	ESI027	Advan	ced cloud c	computing in power system	ns	( ES0) Pow Studies	ver Software Engineering, Master Academic	

# STAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



List of courses being held by the teacher in the accredited study programmes									
	ID	Course name		Study program	me name, study type				
14.	ESI032	Smart grid applications in Cloud		( ES0) Power So Studies	oftware Engineering, Master	Academic			
15.	ESI038	Service oriented architectures in Sm	art Grid	( ES0) Power So Studies	oftware Engineering, Master	Academic			
16.	DAU006	Selected Chapters in Modeling and Dynamic Systems	Simulation of	( E20) Computin Academic Studie	g and Control Engineering, les	Doctoral			
17.	DAU018	Selected Chapters in Distributed Co	ntrol Systems	( E20) Computin Academic Studie	g and Control Engineering, les	Doctoral			
18.	ZRD25A	Selected chapters from Artificial Inge	eligence	( Z01) Safety at	Work, Doctoral Academic St	tudies			
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.	Kljajic, M performa	iroslav; Gvozdenac, Dusan; Vukmirov nce ENERGY 2012 45 (1):304-311	ic, Srdjan Use of Neu	ral Networks for r	modeling and predicting boile	er's operating			
2.	Vukmirović S., Erdeljan A., Čapko D., Lendak I., Nedić N.: Optimization of workflow scheduling in Utility Management System with								
3.	S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, N. Nedic, Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, ISBN 1875-6891, pp. 672 - 679								
4.		ovic, A. Erdeljan, D. Capko, I. Lendak engineering ISSN: 1392-1215, pp. 59		nmon Information	Model with Virtual Meter, El	lectronics and			
5.		o, A. Erdeljan, S.Vukmirovic, I. Lendak UTION MANAGEMENT SYSTEMS, Ir				TA MODEL IN			
6.		rovic, A. Erdeljan, D. Capko, I. Lendak ng, Information technology and contro			ch for Utility Management S	ystem Workflow			
7.		ıkmirović S., Erdeljan A., Kulić F.: Hy 2012, Vol. 16, No S, pp. 215-224, ISS		etwork System for	r Short-Term Load Forecasti	ng, Thermal			
8.		rić S., Erdeljan A., Lendak I., Čapko D strial Research (JSIR), 2010, Vol. 201				al of Scientific			
9.	forecastir	vić S., Vujić G., Vujic B., Jovičić N., Jo ng of traffic air pollution in urban areas I. 14, pp. 79-87, ISSN 0354-9836							
10.	Vukmirović G., Vukmirović S., Vujić G., Stanisavljević N., Ubavin D., Batinić B.: Using ANN model to determine future waste characteristics in order to achieve specific waste management targets -case study of Serbia, Journal of Scientific and Industrial Research (JSIR), 2011, Vol. 70, No 07, pp. 513-518, ISSN 0022-4456								
Sur	mmary data	for teacher's scientific or art and profe	essional activity:						
Quot	ation total:		0						
Total	Total of SCI(SSCI) list papers: 12								
Curre	Current projects : Domestic : 2 International : 0								



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name:			Vukobratović V. Dejan						
Acad	lemic title:				Assistant Professor				
Nam	e of the inst	itution v	vhere the te	eacher works full time and					
starti	ng date:				01.11.2003				
Scie	ntific or art f	ield:			Telecommun	ications and	Signal Processing		
Acad	lemic caries	er	Year	Institution			Field		
Acad	lemic title el	ection:	2009	Faculty of Technical Science	ences - Novi S	ad	Telecommunications and Signal Processing		
PhD	thesis		2008	University of Novi Sad -	Novi Sad		Telecommunications and Signal Processing		
Ť	ster thesis		2005	Faculty of Technical Science			Telecommunications and Signal Processing		
	elor's thesis		2001	Faculty of Technical Science			Telecommunications and Signal Processing		
List	of courses b	eing he	ld by the te	acher in the accredited stu	ıdy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	BM119B	Wirele	ss sensor r	networks		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
2.	BMI102	Comm	unication S	systems		( BM0) Bio Studies	medical Engineering, Undergraduate Academic		
3.	EK200	Develo Proces		ols for Communications an	d Signal	Undergrad (E10) Pow	asurement and Control Engineering, luate Academic Studies er, Electronic and Telecommunication		
	FIGOR	N4- 1 "		and the store of O	0		g, Undergraduate Academic Studies er, Electronic and Telecommunication		
4.	EK203	Modelling and Simulation of Communication			n Systems	Engineerin	g, Undergraduate Academic Studies er, Electronic and Telecommunication		
5.	EK321	11 IP technology				Engineerin	ngineering, Undergraduate Academic Studies		
6.	ETI21	21 Communication Protocols				( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
7.	ETI23	Wirele	ss Commui	nications		( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
8.	ETI31	Video	Technology	/		( E02) Electronics and Telecommunications, Undergraduate Professional Studies			
9.	S1329P	Introdu	uction to Co	mmunication Networks			tal Traffic and Telecommunications, luate Academic Studies		
10.	DE414S	Moder	n Coding T	heory			ver, Electronic and Telecommunication g, Specialised Academic Studies		
11.	DE514S	Multim	edia Proce	ssing and Communication	s		ver, Electronic and Telecommunication ig, Specialised Academic Studies		
12.	S0152	Next G	Generation ⁻	Telecommunication Netwo	orks	( S01) Pos Academic	tal Traffic and Telecommunications, Master Studies		
13.	SI015	Integra	ated Service	es Digital Network (ISDN)			ver, Electronic and Telecommunication g, Specialised Professional Studies		
14.	SI016	Advan	ced ISDN N	Networks			ver, Electronic and Telecommunication g, Specialised Professional Studies		
15.	SI027	Advan	ced IP Com	nmunications			ver, Electronic and Telecommunication g, Specialised Professional Studies		
16.	BMIM2D	Inform	ation theory	y in biosystems		( BM0) Bio	medical Engineering, Master Academic Studies		
17.	DE414	Mode	rn Coding T	Theory		( E10) Pow	ver, Electronic and Telecommunication g, Doctoral Academic Studies		
18.	DE514	Multim	edia Proce	ssing and Communication	s	( E10) Pow	ver, Electronic and Telecommunication g, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					
1.	Vukobratović D., Stanković V., Sejdinović D., Fagoonee-Stankovic L., Xiong Z.: Scalable Video Multicast Using Expanding								
2.	Stefanovi	ć Č., Vı	ıkobratović		i R.: Packet-ce	entric approa	ach for distributed sparse-graph coding in wireless		



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative renerences (minimum 5, not more than 10)						
3.	Stefanović Č., Vukobratović D., Chiti F., Niccolai L., Crnojević V., Fantacci R.: Urban Infrastructure-to-Vehicle Traffic Data Dissemination Using UEP Rateless Codes, IEEE Journal on Selected Areas in Communications, 2011, Vol. 29, No 1, pp. 94-102, ISSN 0733-8716, UDK: 10.1109/JSAC.2011.110110						
4.	Vukobratović D., Stefanović Č., Chiti F., Crnoje Sensor Networks, IEEE Journal on Selected A UDK: 10.1109/JSAC.2010.100921						
5.	Sejdinović D., Vukobratović D., Doufexi A., Šer Protection, IEEE Transactions on Communicat						
6.	Vukobratović D., Šenk V.: Design and Evaluat Communications, 2009, Vol. 57, No 8,, pp. 227	•			ons on		
7.	Dejan Vukobratovic, Vojin Senk: "Generalized Communications Letters, Vol.12, No.1, pp. 32-	,	gressive-Edge-Gr	owth LDPC Code Design", If	EEE		
8.	Stefanović Č., Vukobratović D., Stanković V., F ad-hoc networks, Ad Hoc Networks, 2012, ISS		entric approach fo	r distributed sparse-graph co	oding in wireless		
9.	Vukobratović D., Vladimir S.: Unequal Error Pr Transactions on Communications, 2012, Vol. 6			gies for Erasure Channels, IB	EEE		
10.	Vukobratović D., Clavier L., Matthias W., Werner T., Andreas C., Kimmo K.: Adaptive Coding, Modulation and Signal Processing - in Pervasive Mobile and Ambient Wireless Communications, Heidelberg, Springer, 2012						
Sur	Summary data for teacher's scientific or art and professional activity:						
Quot	uotation total : 0						
Tota	otal of SCI(SSCI) list papers: 9						
Curr	Current projects : Domestic : 0 International : 2						

# STAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name:					Zdravković T. Sunčica						
Academic title:				Assistant Professor							
		itution v	vhere the te	acher works full tim	e and						
starting date:					01.01.2004	01.01.2004					
Scie	ntific or art f	ield:				Psychologica	Science				
Acad	demic caries	er	Year	Institution				Field			
Acad	demic title e	ection:	2009					Psyc	chological Science		
PhD	thesis		2002	Rutgers University	/ - Nev	wark, New Jers	еу	Psyc	chological Science		
Mag	ister thesis		2000	Rutgers University	/ - Nev	wark, New Jers	еу	Psyc	chological Science		
Bach	nelor's thesi	3	1994	Faculty of Philoso	phy - l	Beograd		Psyc	chological Science		
List	of courses b	eing he	ld by the tea	acher in the accredit	ted stu	udy programme	s				
	ID	Course	e name				Study pro	gramr	me name, study type		
1.	El303	Cognit	tive Process	ses for Engineers					ectronic and Telecomm dergraduate Academic		
2.	FDS222	Lightne	ess and Co	lour Perception			( F00) Graphic Engineering and Design, Doctoral Academic Studies			toral Academic	
Re	presentative	reffere	nces (minin	num 5, not more tha	n 10)						
1.	Zdravkov	ić, S., M	1ilin, P (200	6). "The underlaying	distri	ibution of lightn	ess matche	s". Fe	chner's days Proceedi	ngs.	
2.	Zdravkov (1185-12		conomou, I	E and Gilchrist, A (2)	006).	Lightness of an	object unde	er two	illumination levels. Pe	rception	on. Vol. 35
3.	Stojanovi	ć R., Z	dravković S	. (2007) Mentalna e	ksploi	racija distanci n	a mapama i	i u rea	Inom prostoru. Psiholo	gija, 4	10, 1, (93-111)
4.	Stevanov	, Z., Zdı	ravković. S.	(2007) Prepoznava	nje id	entiteta na osn	ovu pojedini	ih delo	ova lica. Psihologija, 40	, 1, (3	37-57)
5.	S. Zdravl	ković: "C	)pažanje du	ıbine u pokretnim dv	/odime	enzionalnim stir	mulusima" (2	2003).	Psihologija, vol. 36 (3	)	
6.	S. Zdravl	ović: Ar	nalysis of de	epth percepts induce	ed by	mobile two-dim	ensional sti	muli (2	2002). Psihologija, Vol.	35 (b	r. 3-4)
7.			nfluence of olement Vol		pends	on the number	of illuminati	ion le	vels",ECVP, Budimpeši	ta, Ma	idjarska, 2004;
8.	S. Zdravl 2003;	ković, A	. Gilkristom	:"Computation of illu	umina	tion level in hur	nan vision",	Psych	nonomics Society, Van	couve	r, Canada,
9.	S. Zdravl Italija, 20		Effects of illu	ımination edge posit	tion ar	nd sharpness o	n lightness"	,Symp	osium on Perception a	nd Co	ognition, Trst,
10.	S. Zdravl 32; 150a;		Spotlight size	e determines lightne	ess; pı	ublikovano u Pe	erception", E	CVP,	Pariz, Francuska, 200	3, Sup	oplement Vol.
Sur	mmary data	for teac	cher's scient	tific or art and profes	ssiona	al activity:					
	tation total:				4						
	l of SCI(SS	<u> </u>	apers :		7						
Current projects : Domes						estic:	1		International:		1

# TAS STUDIO

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name:					Zuković M. Miodrag			
Acad	lemic title:				Assistant Professor			
Nam	e of the inst	itution v	vhere the te	acher works full time and	Faculty of Technical Sciences - Novi Sad			
starti	ng date:				01.12.1995			
Scientific or art field:					Mechanics			
Acad	lemic carie	er	Year	Institution			Field	
Acad	lemic title e	ection:	2009	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
PhD	thesis		2008	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
Magi	ster thesis		2000	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
Bach	elor's thesi	3	1994	Faculty of Technical Sci	ences - Novi Sa	ad	Mechanics	
List o	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	s		
	ID	Course	e name			Study pro	gramme name, study type	
1.	IAKI01	Select	ed Chapter	s in Kinematics		( F10) Eng Studies	ineering Animation, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
2.	M103	Mecha	nice 1			( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
	141100	WICOID					chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
3.	M107	Mecha	nice 2			( M30) Energy and Process Engineering, Undergraduate Academic Studies		
J.	WITO	MEGNA	111103 2				chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
4.	M201	Mecha	nice 3			( M30) Ene Academic	ergy and Process Engineering, Undergraduate Studies	
7.	IVIZOT	MECHA	illics 5			, ,	chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
							chanization and Construction Engineering, uate Academic Studies	
5.	M2411	Theory	of Oscillat	ion		, ,	chnical Mechanics and Technical Design, uate Academic Studies	
						( P00) Prod Studies	duction Engineering, Undergraduate Academic	
6.	M4301	Comp	uter Method	ls in Mechanics			chnical Mechanics and Technical Design, uate Academic Studies	
						( Z01) Safe	ety at Work, Undergraduate Academic Studies	
7.	Z108	Funda	mentals of	Mechanics		( ZC0) Clea Academic	an Energy Technologies, Undergraduate Studies	
						(Z20) Envii Studies	ronmental Engineering, Undergraduate Academic	
	DMAG	Dia	oborie:			( BM0) Bio Studies	medical Engineering, Undergraduate Academic	
8.	BMI127	Biome	chanics				er, Electronic and Telecommunication g, Undergraduate Academic Studies	
9.	M44061	Optimi	zation of m	echanical systems			chnical Mechanics and Technical Design, uate Academic Studies	

# ASTRAS STUDIOS

### UNIVERSITY OF NOVI SAD

### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES Power, Elect

Power, Electronic and Telecommunication Engineering



List o	List of courses being held by the teacher in the accredited study programmes								
	ID	Course name		Study programi	me name, study type				
10.	BMIM4A	Transport phenomena and Living sy	stems	( BM0) Biomedical Engineering, Master Academic Studies					
11.	M45021	5021 Computer Methods in Mechanics 2 ( M40) Technical Mechanics and Technical Design, Master Academic Studies							
12.	DTM01	Computer Methods in kinematics an mechanical systems	d dynamics of	( M40) Technica	Mechanics, Doctoral Acade	emic Studies			
Rep	oresentative	e refferences (minimum 5, not more th	an 10)						
1.		M. and Cveticanin, L.: Chaotic Respo 2007, Vol. 13, No. 6, str. 751- 767, ISS		ng System of Non	i-ideal Type, Journal of Vibra	ation and			
2.	Zukovic,ľ 1229–12	M., Cveticanin,L., Chaos in non-ideal r 46, 2009	nechanical system wit	h clearance, Jour	nal of Vibration and Control	, 15(8):			
3.		Zuković, TORZIONE PARAMETARSŁ ENJEM, Magistarska teza, Novi Sad,		DRIČNOG ZUPČ	ASTOG PARA SA EVOLVE	NTNIM			
4.	ZUKOVIĆ M NELINEARNE TORZIONE OSCILACIJE IL ZUPČASTIM PRENOSNICIMA VIJ Međunarodna konferencija fleksihilna								
5.		M., Radomirović, D. Kuzmanović, S.: onstruisanju, oblikovanju i dizajnu KOI				ıktora, Drugi			
6.		ović, D., Zuković. M., Gligorić, Radojka Vol.7, No.4, Novi Sad, Decembar, 200		iba i mase prikolio	ce na kretanje traktora, Trak	tori i pogonske			
7.		M., Radomirović, D. Rakarić, Z.: Nelir ENCIJA FLEKSIBILNE TEHNOLOGI				ARODNA			
8.		ović, D., Maretić, R., Zuković. M.,: UN Godina 27(2003), broj 1, strana 119-12		IATE RAVANSKI	H KRIVIH U MEHANICI, Let	opis naučnih			
9.		ović, D., Gligorić, Radojka, Zuković. M o.4, Novi Sad, Novembar, 2003, str.12		jednoosovinskor	n prikolicom, Traktori i pogo	nske mašine,			
10.	M. Zuković and Z. Rakarić: Steady state vibration of mechanical system with electric motor and nonlinear spring, Book of Abstracts, The First International Conference on COMPUTATION MECHANICS, Belgrade (CM'04), Serbia and Montenegro, November, 15-17, 2004., 31								
Sur	mmary data	for teacher's scientific or art and profe	essional activity:						
	ation total:		0						
		CI) list papers :	7	<u> </u>	F				
Current projects: Domestic: 1 International: 0					0				



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

						ivanov D. Ljiljana			
	Academic title:					Full Professor			
Name of the institution where the teacher works full time and					chnical Scie	nces - Novi Sad			
ng date:				15.03.1976					
				Electronics					
	-					Field			
	ection:					Electronics			
						Electronics			
						Electronics			
		-				Electrical and Computer Engineering			
of courses b	eing nei	d by the tea	acher in the accredited stu	ldy programme	:S				
ID	Course	e name			Study pro	gramme name, study type			
E222A	Electro	nics			Académic				
FM303	Microe	lectronics				asurement and Control Engineering, uate Academic Studies			
						er, Electronic and Telecommunication g, Undergraduate Academic Studies			
11440					` ′	chatronics, Undergraduate Academic Studies			
H110	Materia	ais in Electr	rical Engineering			asurement and Control Engineering, uate Academic Studies			
					( H00) Med	chatronics, Undergraduate Academic Studies			
H311	Applica	ation of Ser	nsors and Actuators		(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies				
BM117C	C MEMS and NEMS				( BM0) Biomedical Engineering, Undergraduate Academic Studies				
BMI107 Materials and fabrication technologies in medical				edical devices	Studies (E10) Pow	medical Engineering, Undergraduate Academic er, Electronic and Telecommunication g, Undergraduate Academic Studies			
BMI110	Sensor	rs and actu	ators in medicine		( BM0) Bio Studies	medical Engineering, Undergraduate Academic			
DE101S			croelectronic technologies	and	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies				
DE502S	Micro-s	sensors and	d MEMS		(E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies				
EM517	Modeli	ng and Sim	nulation of Semiconductor	Components		er, Electronic and Telecommunication g, Master Academic Studies			
SI014	Microe	lectronic te	chnologies		, ,	ver, Electronic and Telecommunication g, Specialised Professional Studies			
SI024	Applica	ation of Ser	nsors and Actuators			ver, Electronic and Telecommunication g, Specialised Professional Studies			
BMIM1D	Applica	ation of ME	MS and NEMS in biomedi	cine	(BM0) Bio	medical Engineering, Master Academic Studies			
EM519	Sensor	rs, actuator	s, MEMS and NEMS			er, Electronic and Telecommunication g, Master Academic Studies			
DE101			croelectronic Technologies	s and		ver, Electronic and Telecommunication g, Doctoral Academic Studies			
DE502	Micro-s	sensors and	d MEMS			ver, Electronic and Telecommunication g, Doctoral Academic Studies			
oresentative	refferer	nces (minin	num 5, not more than 10)						
G.Stojano	ović, M.	Damnjanov	vić, V. Desnica, Lj. Živanov	v, R. Raghaver	dra, P. Bell	ew, N. Mcloughlin, "High performance zig-zag and			
M.Damnja	anović, (	G. Stojanov	vić, Lj. Živanov, V. Desnica	a, "Comparison	of different	, ,			
	lemic caries lemic title el thesis ster thesis ster thesis lelor's thesis lelor's thesis of courses by ID  E222A  EM303  H110  H311  BM117C  BMI1107  BMI1107  BMI1107  BMI1107  BMI1101  DE101S  DE502S  EM517  SI014  SI024  BMIM1D  EM519  DE101  DE502  presentative R. Ragha Varistor+ G.Stojano meander M.Damnji	ster thesis lelor's thesis of courses being held ID Course  E222A Electro  EM303 Microe  H110 Materia  H311 Applica  BM117C MEMS  BMI107 Materia  BMI107 Materia  BMI10 Sensor  DE101S Contermateria  DE502S Microes  EM517 Modeli  SI014 Microe  SI024 Applica  BMIM1D Applica  BMIM1D Applica  BMIM1D Applica  EM519 Sensor  DE101 Contermateria  DE502 Microes  Contermateria  DE502 Microes  Contermateria  DE502 Microes  Contermateria  DE502 Microes  Contermateria   lemic carieer	lemic carieer Year Institution lemic title election: 2000 Faculty of Technical Scithesis 1989 School of Electrical Engister thesis 1980 School of Electrical Engister thesis 1974 School of Electrical Engister thesis 1974 School of Electrical Engister School of Electronics  EM303 Microelectronics  BM1107 Materials in Electrical Engistering  BMI110 Sensors and NEMS  BMI110 Sensors and Actuators in medicine  DE1015 Contemporary microelectronic technologies materials  DE5025 Micro-sensors and MEMS  EM517 Modeling and Simulation of Semiconductor  SI014 Microelectronic technologies  SI024 Application of Sensors and Actuators  BMIM1D Application of MEMS and NEMS in biomeditection Sensors, actuators, MEMS and NEMS  DE101 Contemporary Microelectronic Technologie Materials  DE502 Micro-sensors and MEMS  oresentative refferences (minimum 5, not more than 10)  R. Raghavendura, P. Bellew, N. Mcloughlin, G. Stojanović, U. Desnica, Lj. Živanov meander inductors embedded in ferrite material, "Jour M.Damnjanović, G. Stojanović, Lj. Živanov, V. Desnica C. Stojanović,	lemic carleer	temic carrieer				



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Rep	Representative refferences (minimum 5, not more than 10)								
4.	M.Damnjanović, G. Stojanović, V. Desnica, Lj. Živanov, R. Raghavendra, P. Bellew, N. Mcloughlin, "Analysis, design and characterization of ferrite EMI suppressors," IEEE Transactions on Magnetics (impact factor: 0.837), vol. 42, no. 2, pp. 270-277, 2006.								
5.	G. Stojanović, Lj. Živanov, "Novel efficient method for inductance calculation of inductors with optimized layout," International Journal of RF and Microwave Computer-Aided Engineering, vol. 16, no. 5, pp. 463-469, September 2006								
6.	V. Desnica, Lj. Živanov, O. Aleksić, "The modeling and design of symmetrical thick film EMI/EMC cells", Studies in Applied Electromagnetics and Mechanics: Electromagnetic Fields in Electrical Engineering, vol. 22, pp. 395-400, IOS Press, Amsterdam, 2002								
7.	7. V. Desnica, Lj. Živanov, M. Nimrihter, O. Aleksić, M. Luković: "A Comparative Characteristics of Thick Film Integrated LC Filters", IEEE Transactions on Instrumentation and Measurement - IMTC Special Issue, Vol. 51, No. 4, pp. 570-576,								
8.	V. Desnica, Lj. Živanov, O. Aleksić, S. Jenei: "I transformers", COMPEL (Computation and Ma 2000								
9.	P.M.Nikolić, M.B.Pavlović, Z.Maričić, S.Djurić, reflectivity spectra of single crystal Ba hexaferr								
10.	P.M.Nikolić, Lj.D.Živanov, O.S.Aleksić, D.Samaras, G.Gledhil, J.Collins: "Far infrared optical properties of single crystal Ba- and Sr- hexaferrite", Infrared Physics, Vol.30,								
Sur	Summary data for teacher's scientific or art and professional activity:								
Quot	ation total :	48							
Total	Total of SCI(SSCI) list papers: 12								
Curre	Current projects: Domestic: 1 International: 3								



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name and last name: Živa					Živanov B. M	Živanov B. Miloš			
<b>—</b>	lemic title:	-			Full Professor				
Name of the institution where the teacher works full time and			Faculty of Technical Sciences - Novi Sad						
starti	ng date:				01.04.1994				
Scientific or art field: Ele					Electronics	Electronics			
Acad	lemic carie	er	Year	Institution		Field			
Acad	lemic title e	lection:	2004	Faculty of Technical Sci	ences - Novi S	ad	Electronics		
PhD	thesis		1992	School of Electrical Eng	ineering - Beog	grad	Electronics		
Magi	ster thesis		1978	School of Electrical Eng	ineering - Beog	grad	Electronics		
Bach	elor's thesi	S	1973	School of Electrical Eng	ineering - Beog	grad	Physics		
List	of courses b	eing he	ld by the te	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	gramme name, study type		
1.	EM414	Optoel	ectronics				er, Electronic and Telecommunication g, Undergraduate Academic Studies		
2.	EM301A	Analog	Microelec	tronic Circuits		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
3.	EM430A	Contro	l and proce	ess electronics		Engineerin	er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	EM444B	Applie	d electronic	es			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
5.	DE201S	Select	ed Chapter	s in Optoelectronics and F	Photonics		ver, Electronic and Telecommunication g, Specialised Academic Studies		
6.	DE503S	Industi	rial Electror	nics			ver, Electronic and Telecommunication g, Specialised Academic Studies		
7.	E1SO01	E1SO01 Modern technologies in electrical engineering			ng		ver, Electronic and Telecommunication g, Specialised Professional Studies		
8.	H1402	Digital	Controlling	Electronics		( H00) Med	chatronics, Master Academic Studies		
9.	SI013	Applie	d electronic	es in industry			ver, Electronic and Telecommunication g, Specialised Professional Studies		
10.	SI035	Electro	onic System	ns in Oil Industry		( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies			
11.	BMIM1A	Applica	ations of las	sers in medicine		( BM0) Biomedical Engineering, Master Academic Studies			
12.	DE117S	Select	ed chapters	s from optoelectronics sen	sors systems	, ,	ver, Electronic and Telecommunication g, Specialised Academic Studies		
13.	DE315S	Optoel	ectronics s	ensors systems-advanced	d course		ver, Electronic and Telecommunication g, Specialised Academic Studies		
14.	DE418S	Design	of comple	x optoelectronics systems	1	( E11) Pow Engineerin	ver, Electronic and Telecommunication g, Specialised Academic Studies		
15.	EM435A	Electro	onic System	ns in Oil Industry		, ,	er, Electronic and Telecommunication g, Master Academic Studies		
16.	EM437A		oplication of able energy	f electronic systems in clear	an and		er, Electronic and Telecommunication g, Master Academic Studies		
17.	EM439A	Electro	onics in veid	chles			er, Electronic and Telecommunication g, Master Academic Studies		
18.	EM521	Applie	d optoelect	ronics		, ,	er, Electronic and Telecommunication g, Master Academic Studies		
19.	EM523	Applie	d electronic	es in industry			er, Electronic and Telecommunication g, Master Academic Studies		
20.	DE201	Select	ed Chapter	s in Optoelectronics and F	Photonics		ver, Electronic and Telecommunication g, Doctoral Academic Studies		
21.	DE503	Industr	rial Electror	nics		( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies			
22. DE117 Selected chapters from optoelectronics sensors system					sors systems	(E10) Pow	chnical Mechanics, Doctoral Academic Studies  ver, Electronic and Telecommunication  a. Doctoral Academic Studies		
			<u> </u>	·		∟⊏rigineerin	g, Doctoral Academic Studies		
Re	Representative refferences (minimum 5, not more than 10)								



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Re	Representative refferences (minimum 5, not more than 10)								
1.	Šašić B.,Živanov M., Lazić M.: Desing of Mult Nathwani and Artie Ng (Ed.),, 2010, str. 1-51, I			Cell/Battery Power Source	s, Beč, Jatin				
2.	Manojlović L., Živanov M.: White-Light Interferometric Sensor for Rough Surface Height Distribution Measurement, IEEE Sensors Journal, 2010, Vol. 10, No 6, pp. 1125-1132, ISSN 10.1109/JSEN.2007.90								
3.	Slankamenac M., Lukić-Petrović S., Živanov M., Čajko K.: Electrical switching behavior of bulk Cux(AsSe1.4l0.2)100-x glasses: Composition dependence and topological effects, SOLID STATE COMMUN, 2012, Vol. 152, No 13, pp. 1160-1163, ISSN 0038-1098								
4.	Sekulić D., Satarić M., Živanov M.: Symbolic Computation of Some New Nonlinear Partial Differential Equations of 4. Nanobiosciences Using Modified Extended Tanh-function Method, Applied Mathematics and Computation, 2011, Vol. 218, No 7, pp. 3499-3506, ISSN 0096-3003								
5.	Stupar D., Bajić J., Manojlović L., Slankamenac M., Joža A., Živanov M.: A Wearable Low-Cost System for Human Joint Movements Monitoring Based on Fiber-Optic Curvature Sensor, IEEE Sensors Journal, 2012, ISSN 10.1109/JSEN.2007.90								
6.	6. Manojlović L., Živanov M.: Spectrally Resolved White-Light Interferometric Sensor for Absolute Position Measurement Based on Hilbert Transform, IEEE Sensors Journal, 2012, Vol. 12, No 6, pp. 2199-2204, ISSN 10.1109/JSEN.2007.90								
7.	Bajić J., Stupar D., Manojlović L., Slankamena and Actuators A: Physical, 2012, Vol. 185, pp.			igh-sensitivity fiber-optic tilt	sensor, Sensors				
8.	Manojlović L., Živanov M., Slankamenac M., B phase-locked low-coherence interferometry, Al				easurement with				
9.	M.B. Živanov, "Elektronika - elektronske komptehničkih nauka, No. 129, Novi Sad, str. 651. 2		projektovanje", 2	001. Univerzitet u Novom S	adu, Fakultet				
10.	G.Mančić, S.Martinović, M.Živanov, "Karotažna	a merenja - osnovni fiz	zički principi", 200	2.					
Sur	mmary data for teacher's scientific or art and profe	essional activity:							
Quot	tation total :	32							
Tota	Total of SCI(SSCI) list papers: 23								
Current projects : Domestic : 2 International : 2									



### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



### Science, arts and professional qualifications

Name	e and last n	ame:			Župunski Ž. Ivan				
Academic title:					Full Professor				
-		itution v	here the te	eacher works full time and	Faculty of Technical Sciences - Novi Sad				
starti	ng date:				14.10.1974				
Scientific or art field:					Electrical Measurements				
Acad	emic caries	er	Year	Institution			Field		
Acad	emic title el	ection:	1997	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
PhD	thesis		1985	Faculty of Technical Sci	ences - Novi S	ad	Electrical Measurements		
Magi	ster thesis		1981	Faculty of Technical Sci	ences - Novi S	ad	Automatic Control and System Engineering		
Bach	elor's thesis	3	1973	Faculty of Technical Sci	ences - Novi S	ad	Automatic Control and System Engineering		
List c	of courses b	eing hel	d by the te	acher in the accredited stu	udy programme	es			
	ID	Course	e name			Study pro	ogramme name, study type		
1.	E130	Electric	cal Measur	ements		Academic			
						Ùndergrad	tal Traffic and Telecommunications, uate Academic Studies		
2.	E130A	Electri	cal Measur	ements			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
3.	E140	Measu	ring in Elec	etronics			er, Electronic and Telecommunication g, Undergraduate Academic Studies		
4.	E142	Measu	ring Instrur	ments		Ùndergrad	easurement and Control Engineering, luate Academic Studies		
						(E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies			
5.	El408	Project Management					E10) Power, Electronic and Telecommunication ngineering, Undergraduate Academic Studies		
6.	EIEEM	Electrical and electronic measurements				( BM0) Bio Studies			
7.	EIEEMI	Electric	cal and ele	ctronic measurements in i	ndustry		( MR0) Measurement and Control Engineering, Undergraduate Academic Studies		
8.	EIMNV	Measu	rements of	non-electrical quantities		Ùndergrad	asurement and Control Engineering, uate Academic Studies er, Electronic and Telecommunication		
						Èngineerin	g, Undergraduate Academic Studies		
9.	DE204S	Selecte	ed topics in	metrology		Engineerin	( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies		
10.	SI023	Measu	rement and	d processing of the results			Power, Electronic and Telecommunication neering, Specialised Professional Studies		
11.	SI039	Metrolo	ogy				ver, Electronic and Telecommunication g, Specialised Professional Studies		
12.	EIIKL	Engine	ering comr	munication, logistics and ir	ntellectual	( MR0) Me Academic	asurement and Control Engineering, Master Studies		
12.	EIIKL	proper	ty				er, Electronic and Telecommunication g, Master Academic Studies		
13.	EIORM	Measu	rement and	d Data Processing			er, Electronic and Telecommunication g, Master Academic Studies		
14.	DE204	Selecte	ed Chapter	s in Metrology			ver, Electronic and Telecommunication g, Doctoral Academic Studies		
Rep	oresentative	reffere	nces (minin	num 5, not more than 10)					
1.	S. Avram 376, Apr.		ıpunski: "Aı	n AC Comparator for Audi	o Frequency W	/aveforms",	IEEE Trans. Instrum. Meas., vol. IM-40, pp. 373-		
2.		ki, L. Ho		ujičić, S. Milovančev: "Pov	ver Factor Calil	brator", IEE	E Trans. Instrum. Meas., vol. IM-46, No.2, pp.		
3.	V. Vujišić, I. Župunski, S. Milovančav, "Predetermination of the Quantization Error in Digital Measurement Systems, IEEE Trans								
4.	V. Vujičić, S. Milovančev, M. Pašaljević, D. Pajić, I. Župunski, "Low Frequency Stochastic True RMS Instrument", IEEE Trans								

# CHIAS STUDIO

#### UNIVERSITY OF NOVI SAD

#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Representative refferences (minimum 5, not more than 10) M. Pešaljević, I. Župunski: "Komparacija električnih mernih etalon-uređaja", Savezni zavod za mere i dragocene metale, naučna knjiga, 339 strana, Beograd, 1981. I. Župunski, P. Miljanić: "AC Power Calibrator with a Precision Digital Wattmeter in Feedback Loop", IEEE Trans. Instrum. Meas., 6 vol IM-36, pp.354-356, June 1987. I. Župunski, P. Miljanić: "AC Power Calibrator with a Precision Digital Wattmeter in the Feedback Loop", Conference on Precision Electromagnetic Measurements CPEM "86, CPEM"86 Digest, Editor: Ronald F. Dziuba, pp. 23-24, Gaithersburg, 1986. S. Avramov, I. Župunski: "One AC Comparator", Conference on Precision Electromagnetic Measurements CPEM "90, CPEM"90 8 Digest, Editor: Gary R. Hanes, pp. 74-75, Ottawa, 1990. S. Milovančev, V. Vujičić, V. Katić, I. Župunski: "An Intelligent Multichannel Converter of AC Electrical Power and/or Voltage and Current RMS Values", Proceedings of IEEE International Symposium on Industrial Electronics ISSIE "95, pp. 138-142, Athens, 9 Greece, 1995. V. Vujičić, I. Župunski, S. Milovančev: "General Method for Quantization Error Predetermination in Digital Measurement System", 10. Conference on Precision Electromagnetic Measurements CPEM "96, CPEM"96 Digest, pp.49-50, Editor: Andreas Braun, Braunschweig, Jun. 1996. Summary data for teacher's scientific or art and professional activity: Quotation total Total of SCI(SSCI) list papers : 10 2 Current projects Domestic: International: 0



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 10. Organizational and Material Resources

To perform a study programme, the adequate human, spatial, technical and technological, library and other resources suitable to the study programme features and predicted students' number are to be provided. Lectures are held in amphitheatres, classroomas and specialized computer or measurement laboratories (between 12 and 20 work places) which are equipped with contemporary equipment where students experimentally prove and deepen the matter taught in lectures. Library is within the Faculty of Technical Sciences building, and has more than 250 bibliographic units which are relevant for this study programme. All courses within the study programme are accompanied by adequate textbook literature, teaching aids and props available for normal teching process.



#### FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

### Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



#### Standard 11. Quality Control

The quality control of the study programme is performed regularly and systematically through selfevaluation and external quality control. At the Faculty of Technical Sciences there is a perennial postitive practice of interviewing students through questionnaire.

The quality control of the study programme is perfomed through following activities: (a) interviewing students by questionnaire at the end of the lectures for the given course, (b) interviewing graduated students by questionnaire about study programme quality and logistic support to the studies at the diploma awarding ceremony, (c) interviewing students by questionnaire about evaluation of logistic support to the studies at the certification of the study year, (d) interviewing students by questionnaire when enrolling to the year of study. Students assess study programme of the previously completed school year, (e) interviewing lecturing and non-lecturing staff by questionnaire about quality of the study programme and logistic support to the studies.

# SECTION STUDIOS

#### UNIVERSITY OF NOVI SAD

FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6

## Study Programme Accreditation

UNDERGRADUATE ACADEMIC STUDIES

Power, Electronic and Telecommunication Engineering



Standard 12. Distance Education

Distance learning is not available within this study programme.