# STUDY PROGRAMME ACCREDITATION MATERIAL: 

## MEASUREMENT AND CONTROL ENGINEERING

MASTER ACADEMIC STUDIES

Novi Sad
2012.

Prevod sa srpskog jezika:

Jelisaveta Šafranj
Ivana Mirović
Marina Katić
Vesna Bodganović
Dragana Gak
Ličen Branislava

|  | FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
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| Programme name | Measurement and Control Engineering |
| :--- | :--- |
| Independent higher education institution where the <br> programme is being executed | University of Novi Sad |
| Higher education institution where the programme is <br> 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 | Master Academic Studies |
| Study scope, expressed in ECTS | 60 |
| Academic degree, abbreviation | Master in Electrical and Computer Engineering, <br> M.EI.Comp.Eng. |
| Study length | 1 |
| Programme implementation starting year | 20 |
| Future course implementation starting year (for new <br> programme) | 2013 |
| Number of students attending this programme | 0 |
| Planned number of students to be enrolled in this <br> programme | 32 |
| Programme approval date (state the approval <br> issuer) | 14.11 .2012 - Science Education Council |
| Programme language | Serbian, English |
| Programme accreditation year |  |
| Web address containing programme information | http://www.ftn.uns.ac.rs |


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|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Standard 00. Introduction
The study programme of the Graduate Academic Studies of Measurement and Control Engineering is the continuation of the undergraduate academic study programme of the same name at the Faculty of Technical Sciences, the University of Novi Sad.
The study curriculum and programme is in accordance with the most up-to-date scientific achievements and Bologna recommendations. The concept of the programme is defined in such a way that it educates future masters of engineering who will posses the knowledge which is necessary for practical work and which at the same time enables them to continue education at the corresponding specialist or doctoral studies.
Graduate Academic Studies-Master last one year. During that time students work on the final-master thesis. Students who successfuly complete the graduate academic studies receive a degree of Master in Electrical and Computer Engineering.
The rapid development in the field of electrical and computer engineering has determined the structure and content of the study programme and the need to develop specializations in the specific areas of interest. The emphasis of the study programme is placed on working in smaller groups in well equipped experiment laboratories and computer rooms appropriate for successful science-research work in the field of electrical and computer engineering.The studies especially value independent work, encourage participation in practical professional and developmental projects within the laboratories and develop problem solving abilities. In addition to the necessary theoretical and practical knowledge, all these activities provide the feeling of self confidence and completeness which is necessary for the successful integration in the professional environment.

The name of the study programme is Measurement and Control Engineering. The academic degree obtained is Master in Electrical and Computer Engineering.
The structure of the programme enables the students to acquire the increased knowledge in the chosen area of interest, to gain the knowledge which will enable them to use professional literature, to apply the knowledge to practical professional problems as well as to continue their studies, if they decide to do so. In order to be admitted to the study programme students need to have graduated at the appropriate graduate academic studies with at least 240 ECTS and to have passed the admission examination. The admission examination is taken to check students' knowledge in Measurement and Control Engineering and is worth 60 points. A student passes the admission examination if they have obtained minimally 14 points.
Study program of master academic studies Measurement and Control Engineering lasts one year and is worth 60 ECTS. This program of study includes required and elective courses, professional practice and graduate work.
The study program of each course is designed to give students the opportunity to concretize the specific issues in certain areas of electrical engineering and computer science.
Subjects in this study programme last one semester, and thereby make the appropriate number of credits. Standards established that one ECTS credit equals approximately 30 hours of student activities (lectures, exercises, preparing for exams, ...). Student obligations on exercises may include the writing of seminar papers and homework, project assignments, semester and graphic works with every activity of students during the teaching process is monitored and evaluated by Rules of teaching, methodology and awarding ECTS, based on valuation of exam prerequisites and the way of testing the students.
Upon enrollment each student gets an advisor who directs him/her, according to student interests, which subjects to choose from elective positions, where to do the internship and which thesis topic to choose. The proposal that a student and his advisor make is approved by the Commission for the quality of the study program. Advisor checks the progress of students during training at the Faculty.
Courses are carried out in the form of lectures and practice. During the teaching process the emphasis is placed on the student's independent work and research work as well as on their encouraged individual participation in the course realization. At lectures, while using the appropriate modern didacticmethodological methods, students become familiar in 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. At this level of studies, teachers insist on work in smaller groups so that they are able to pay more attention to each student. Practice can be auditory, laboratory, computer or computing. Practice classes can partially be conducted in a factory or other institution.
Each course is worth a certain number of ECTS credits and the Master studies are considered to be completed after the student has fulfilled all the obligations prescribed by the study programme and has attained the minimum of 60 ECTS credits.
UNIVERSITY OF NOVI SAD
Standard 02. Programme Objectives
The goal of the study programme is to educate students for the profession of an master in electrical and
computer engineering in accordance with the society's needs.
The study programme Measurement and Control Engineering is designed to provide the knowledge and
skills that are socially justified and useful. An important segment of every developing society is the
ecucation of highly-competent scientifically and professionaly oriented experts in the field of electrical and
computer engineering, for this field of science, in the most general sense, has played a crucial role in the
development of industry and raising the standard of living in many countries. 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 for qualified master engineers. This study
programme is designed to offer the master engineers in electrical and computer engineering the knowledge
that is in accordance with the highest European and world educational standards.

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|  | Study Programme Accreditation |  |
|  | MASTER ACADEMIC STUDIES Measurement and Control Engineering |  |

The objective of the study programme is to produce qualified master engineers who are highly competent and possess the necessary knowledge and skills needed in further education at the doctoral studies and are able to keep step with the fast technological development in the field of electrical and computer engineering.
The objective of the study programme is to provide high scientific competence and academic skills in the field of electrical and computer engineering. The study programme, additionally, encourages the development of creativity in the problem solving process and the ability of critical thinking, the development of team work skills and the acquisition of specific knowledge and skills related to the chosen study group. One of the specific objectives, which is in accordance with the objectives of professional education at the Faculty of Technical Sciences, is the development of students' awareness of the neccessity for permanent education, professional development and advancement in the fast-advancing field of electrical and computer engineering. Another objective of the study progamme is to provide education for experts who will be able to quickly adjust to team work as well as to present (in written form or orally) the scientific results to the professional and general public, especially through scientific and professional papers.

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|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Standard 04. Graduates` Competencies Students with Master`s degree in electrical and computer engineering who have completed Measurement and Control Engineering study programme have the competence to solve real life problems in practice as well as to continue education if they decide to do so. Their competences include, primarily, critical thinking, the ability to analyze a problem, synthesize a solution, predict the behaviour of the chosen solution with the clear idea of the advantages and disadvantages of the chosen solution. Students are trained to have at all times a clear idea of timing, quality and cost of the proposed solution and to find the optimum balance between these three parameters. By completing this programme, students will be competent in the development, design, construction, implementation and application of modern complex systems and system components in electrical and computer engineering. Students who successfully complete the study programme will be able to independently run experiments and measuring procedures in the field of electrical engineering, to do statistical data processing, and to formulate and present adequate results and conclusions. Special emphasis is placed on the professional ethic development.
Besides the above stated, the studies insist on the intensive use of information-communication technologies and available modern research equipment. Thus, graduated students at this level of studies (master engineers) will be competent for tracking and application of novelties in the profession, as well as for successful and equal cooperation with colleagues in the specific professional field from educational, scientific, research or economic organizations in the country and the environment.

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|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

The curriculum of graduate academic (Master) studies in Measurement and Control Engineering is designed to fulfil all the defined objectives. The structure of the study programme ensures that the elective courses represent al lest $50 \%$ of ECTS credits.
Upon completion of graduate academic studies student wins a minimum of 60 ECTS (which adds to the undergraduate studies' ECTS to at least 300 ECTS). All courses last one semester and carry an appropriate number of ECTS where one ECTS equals approximately 30 hours of student activities. The curriculum defines each course in terms of its name, type of course, year and semester of studies, number of ECTS credits, name of the teacher, objectives of the course and expected outcomes, knowledge and competences, prerequisites for attending the course, content of the course, recommended literature, methods of teaching, types of evaluation and other.
Professional practice and practical work of 45 hours forms a constituent part of the curriculum and is carried out in suitable scientific and research institutions, innovation centres, organizations which provide infrastructure support for innovative activities, industrial and public institutions.
A student's studies are completed with the production of a Master Thesis which consists of study and research work, theoretical and methodological framework necessary for the in depth understanding of the area in which the Master thesis is done and the production of the thesis itself.
Prior to the defence of the thesis the candidate takes an exam on the theoretical and methodological bases usually before a committee formed for the defence. The final grade of the master thesis is formed on the basis of the grade on the theoretical and methodological bases and the grade on the production and defence of the thesis. Master thesis is defended before a committee of at least three professors of whom al least one has to be from another department or faculty.


Table 5.2 Course specification



Table 5.2 Course specification



Table 5.2 Course specification



Table 5.2 Course specification

| Course: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course id: $\quad$ EIDNU |  |  |  |  |
| Number of ECTS: 6 |  |  |  |  |
| Teachers: |  | Mitrović Lj. Zoran, Tomić J. Josif, Vujičić V. Vladimir |  |  |
| Course status: |  | Elective |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |
| Lectures: | Practical classes: | Other teaching types: | Study research work: | Other classes: |
| 3 | 0 | 3 | 0 | 0 |
| Precondition courses None |  |  |  |  |
| 1. Educational goal: <br> The acquisition of basic theoretical and practical knowledge in the field of Supervisory control and data acquisition systems design. |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): <br> The ability to understand the complexity of the system. The ability to define the input and output variables which are required for the remote monitoring and control. Review potential decomposition of the system and the need for redundancy in some parts of the system. The ability to define the critical path. The ability to design a system for remote monitoring and control in various industries. |  |  |  |  |
| Automatic online data acquisition from analog and digital sensors, transducers and other devices for receiving information. Preprocessing and signal processing. Saving the data for further processing. Data archiving. Subsystem for reports generation. System for man-machine interface. Alarm subsystem. The control and command functions and the corresponding subsystem. Standard protocols. Redundancy of system components. The concurrency of process algorithms. Configuring the system. Subsystem for user management. |  |  |  |  |

4. Teaching methods:

Lectures, laboratory exercises, consultations.

| Knowledge evaluation (maximum 100 points) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-examination obligations |  | Mandatory | Points | Final exam |  | Mandatory | Points |
| Laboratory exercise defence |  | Yes | 30.00 | Written part of the exam - tasks and theory |  | Yes | 70.00 |
| Literature |  |  |  |  |  |  |  |
| Ord. | Author | Title |  |  | Publisher |  | Year |
| 1, | David Bailey, Edwin Wright | Practical SCADA for Industry |  |  | Elsevier |  | 2003 |
| 2, | Roger Haines, Douglas Little | Control Systems for Heating, Ventilating and AirConditioning |  |  | Springer |  | 2006 |
| 3, | Havard Devold | Oil and Gas Production Handbook |  |  | ABB |  | 2006 |
| 4, | James Brennan | Food Processing Handbook |  |  | Wiley-VCH |  | 2006 |



Table 5.2 Course specification

| Course: |  |  | Measurement systems in industrial environment |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: |  | EIMIO |  |  |  |  |  |  |  |
| Number of ECTS: |  | 6 |  |  |  |  |  |  |  |
| Teachers: |  |  | Milovančev S. Slobodan, Mitrović Lj. Zoran, Pejić V. Dragan |  |  |  |  |  |  |
| Course status: |  |  | Elective |  |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |  |  |
| Lectures: |  | Practical classes: |  | Other teaching types: |  | Study research work: |  | Other classes: |  |
|  | 3 | 0 |  | 3 |  | 0 |  | 0 |  |
| Precondition courses |  |  |  | None |  |  |  |  |  |
| 1. Educational goal: <br> Acquiring basic knowledge in the field of practical measurements in industrial environment. |  |  |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): <br> Introduction to the measurements and measuring systems in the real industrial environment. Practical training for autonomous work. Essential safety standards in measurements and instrumentation handling. Typical examples of measuring systems and instruments used in everyday practice. Basic troubleshooting of faulty measuring systems. |  |  |  |  |  |  |  |  |  |
| 3. Course content/structure: <br> Characteristics of measuring systems in industrial environment. Measurement safety standards in industrial environment. Characteristics and practical implementation of standard hardware devices. Analog, digital, mixed analog-digital, microprocessor and computer based measuring systems in industrial environment. Typical mistakes in practice while handling measuring devices. Troubleshooting standard problems and faults of measuring systems in practice. Real environment work simulation in laboratory environment. Field work with practical examples of industrial grade measuring systems used in practice. Measurement of basic electrical values in industrial environment. Measurement data reading, processing and interpretation. Autonomous and team work practice. Details of measuring systems for specific industry applications in various fields. |  |  |  |  |  |  |  |  |  |
| 4. Teaching methods: <br> Lectures. Laboratory Practice. |  |  |  |  |  |  |  |  |  |
| 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 - tasks and theory |  | Yes | 50.00 |
| Project |  |  |  | Yes 30.00 |  |  |  |  |  |
| Literature |  |  |  |  |  |  |  |  |  |
| Ord. | Author |  |  | Title |  |  | Publisher |  | Year |
| 1, | Tran Tien Lang |  |  | Electronics of Measuring Systems: Practical Implementation of Analogue and Digital Techniques |  |  | Wiley |  | 1987 |
| 2, | Robert Pease |  |  | Troubleshooting analog circuits |  |  | Newnes |  | 1991 |
| 3, | Lynn Lundquist |  |  | Industrial Electrical Troubleshooting |  |  | Delmar Cengage Learning |  | 1999 |



Table 5.2 Course specification



Table 5.2 Course specification



Table 5.2 Course specification

| Course: |  |  | Real Time Measurements |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: |  | EIMRV1 |  |  |  |  |  |  |  |
| Number | of ECTS: | 6 |  |  |  |  |  |  |  |
| Teachers: |  |  | Mitrović Lj. Zoran, Sovilj M. Platon, Tomić J. Josif |  |  |  |  |  |  |
| Course status: |  |  | Elective |  |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |  |  |
| Lectures: |  | Practical classes: |  | : Other teaching types: |  | Study research work: |  | Other classes: |  |
|  | 3 | 0 |  | 3 |  | 0 |  | 0 |  |
| Precondition courses None |  |  |  |  |  |  |  |  |  |
| 1. Educational goal: <br> The acquisition of knowledge in the field of real-time measurement systems |  |  |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): <br> Ability to design and implement systems for real-time operation, especially real-time measurement systems. |  |  |  |  |  |  |  |  |  |
| 3. Course content/structure: <br> The concept of operation in real-time, in extended real-time and beyond real time. Methods of providing operation in real-time. Designing systems to operate in real time. Analog and digital electronic circuits for use in real-time systems. Operating systems, processors and programmable logic circuits in the context of real-time systems. Oscillators and microcontrollers timer modules in the context of real-time systems. Multi-task modes. Processor communication and synchronization tasks. Development of microprocessor measurement and acquisition real-time systems based on PIC microcontroller families. Development of microprocessor measurement and acquisition realtime systems based on ARM microcontroller families. Development of microprocessor measurement and acquisition real-time systems based on AVR microcontroller families. Development of microprocessor measurement and acquisition real-time systems based on 8051 microcontroller families. |  |  |  |  |  |  |  |  |  |
| 4. Teaching methods: <br> Lectures, auditory exercises, labaratory exercises, 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 | - tasks and theory | Yes | 30.00 |
| Project |  |  |  | Yes | 30.00 | Oral part of the exam |  | Yes | 20.00 |
| Literature |  |  |  |  |  |  |  |  |  |
| Ord. | Author |  |  | Title |  |  | Publisher |  | Year |
| 1, | Phillip A. | plante |  | REAL-TIME SYST | MS DES | IGN AND ANALYSIS | IEEE, Inc. Press WILEY \& SONS, | $\begin{aligned} & \mathrm{d} \mathrm{JOHN} \\ & \mathrm{C} \\ & \hline \end{aligned}$ | 2004 |



Table 5.2 Course specification

| Course: |  |  | Investigation of electromagnetic fields |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: |  | E1IEP |  |  |  |  |  |  |  |
| Number of ECTS: 6 |  |  |  |  |  |  |  |  |  |
| Teacher: |  |  | Đurić M. Nikola |  |  |  |  |  |  |
| Course status: |  |  | Elective |  |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |  |  |
| Lectures: |  | Practical classes: |  | : Other teaching types: |  | Study research work: |  | Other classes: |  |
|  | 3 | 0 |  | 3 |  | 0 |  | 0 |  |
| Precondition courses None |  |  |  |  |  |  |  |  |  |
| Investigations of electromagnetic (EM) fields are becoming more important and more necessary in an effort to assess the level of the EM field exposure of environment and population, in different situations. The objective of this curse is introduction and basic training of young colleagues in the field of investigation of the EM fields from a range of non-ionizing radiation. With presented overview and analysis of the EM field testing methodology, colleagues acquire new and deepen existing knowledge about testing methods, in order to expand the existing scientific knowledge about EM fields, about impact on nearby objects, about effects of exposure and potential unhealthy effects, as well as the necessity for prevention and protection from exposure to EM fields. |  |  |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): |  |  |  |  |  |  |  |  |  |
| The outcome of education of young colleagues is to acquire knowledge and skills, through independent and team work, to implement, improve and develop testing methodology in terms of modeling, calculation and measurement of the EM field level. The presented scientific and research activities in this area will help colleagues to expand the technological foundation of examination, collection and data processing. This raises the level of support to analysis and solution of problems in this area, and further open new opportunities for support to other experts, especially in the field of health care and epidemiological risk from potential unhealthy exposure to the EM fields. Through scientific and research work in this area, colleagues are able to make additional significant contribution to the future development and implementation of new technologies for continuous and systematic examination of the EM field. |  |  |  |  |  |  |  |  |  |
| 3. Course content/structure: |  |  |  |  |  |  |  |  |  |
| This course is intended to present some existing knowledge in areas relevant to the investigation of electromagnetic fields. It is planned to cover the following areas: 1 . selected chapters about theoretical analysis of EM fields, 2. calculation methodology, modeling and testing of EM fields • Analytical and numerical modeling methods and calculations • application of software tools for modeling and calculation (COMSOL, CST Studio ...), • measurement systems for measuring the levels of electromagnetic fields, • Information network for testing EM fields, 3. normative acts and regulations in the field of testing of electromagnetic fields, 4. selected chapters about uncertainty assessment for EM field measurements and 5. requirements of the relevant standards for electromagnetic field testing. It is planned that part of course takes place by engaging colleagues in independent study and research work in the subject area. This work would include active monitoring of primary scientific sources, organization and conduct experiments, as well as writing a scientific paper on this issue. |  |  |  |  |  |  |  |  |  |
| 4. Teaching methods: |  |  |  |  |  |  |  |  |  |
| During the course the following methods apply: 1 lectures - presentation of the theoretical part is followed by examples, contributing to a better understanding and eventual clarification of certain parts of the material, 2 Consultation - besides lectures consultation are held regularly, 3 assistance with laboratory work and 4 study research - by studying scientific journals and other literature colleagues will be able to deepen by self the presented lectures. Working with their teacher colleagues are preparing to write a scientific papers. |  |  |  |  |  |  |  |  |  |
| Knowledge evaluation (maximum 100 points) |  |  |  |  |  |  |  |  |  |
| Pre-examination obligations |  |  |  | Mandatory | Points |  |  | Mandatory | Points |
| Term paper |  |  |  | Yes | 50.00 | Oral part of the exam |  | Yes | 50.00 |
| Literature |  |  |  |  |  |  |  |  |  |
| Ord. |  | Author |  |  | Title |  |  |  | Year |
| 1, | Branko P |  |  | Elektromagnetika |  |  | Građevin |  | 1990 |
| 2, | Jean G. V | Bladel |  | Electromagnetic Fi | ds - Sec | cond Edition | Wiley-IEE |  | 2007 |
| 3 , | JCGM |  |  | Evaluation of meas expression of unce | rement da ainty in m | data - Guide to the measurement | JCGM 10 |  | 2008 |



Table 5.2 Course specification

| Course: |  |  | Intelligent Control Systems |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: |  | E2515 |  |  |  |  |  |  |  |
| Number of ECTS: 6 |  |  |  |  |  |  |  |  |  |
| Teachers: |  |  | Kulić J. Filip, Petrovački P. Dušan |  |  |  |  |  |  |
| Course status: |  |  | Elective |  |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |  |  |
| Lectures: |  | Practical classes: |  | Other teaching types: |  | Study research work: |  | Other classes: |  |
|  | 3 | 0 |  | 3 |  | 0 |  | 0 |  |
| Precondition courses None |  |  |  |  |  |  |  |  |  |
| 1. Educational goal: <br> Students learn about systems of automatic control based on computer intelligence methods. |  |  |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): <br> The acquired knowledge can be used in solving concrete engineering problems. |  |  |  |  |  |  |  |  |  |
| 3. Course content/structure: <br> Application of artificial neural networks in the identification, diagnosis, prediction and control. Fuzzy systems in systems engineering. Neuro fuzzy systems: combining fuzzy logic and neural networks in control. Genetic algorithms in systems engineering. Design of classic and neuro fuzzy regulators using genetic algorithms. Support vector machines and their application in identification and control of systems. |  |  |  |  |  |  |  |  |  |
| 4. Teaching methods: <br> Lectures. Computational and computer practice. Consultations. The exam is written and oral. Passing the written part is the prerequisite for the oral part. The final grade is formed on the bases of achievements at the colloquium, homework assignments and the quality of the written and oral part of the exam. |  |  |  |  |  |  |  |  |  |
| Knowledge evaluation (maximum 100 points) |  |  |  |  |  |  |  |  |  |
| Pre-examination obligations |  |  |  | Mandatory | Points | Final exam |  | Mandatory | Points |
| Project |  |  |  | Yes | 50.00 | Oral part of the exam |  | Yes | 50.00 |
| Literature |  |  |  |  |  |  |  |  |  |
| Ord. | Author |  |  | Title |  |  | Publisher |  | Year |
| 1, | V.Kecman |  |  | Learning and Soft Computing |  |  | MIT Press |  | 2001 |
| 2, | S.M.Kartalopoulos |  |  | Understanding Neural Networks and Fuzzy Logic |  |  | IEEE Press |  | 1996 |
| 3, | J.S.R.Jang; C.T.Sun; E.Mizutani |  |  | Neuro-Fuzzy and Soft Computing |  |  | Prentice Hall |  | 1997 |
| 4, | R.L.Haupt; S.E.Haupt |  |  | Practical Genetic Algorithms |  |  | Wiley-Interscience |  | 2004 |



Table 5.2 Course specification



Table 5.2 Course specification


Table 5.2 Course specification



Table 5.2 Course specification



Table 5.2 Course specification

| Course: |  |  | Parallel and distributed architectures |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: |  | E2529 |  |  |  |  |  |  |  |
| Number | of ECTS: | 6 |  |  |  |  |  |  |  |
| Teacher: |  |  | Hajduković P. Miroslav |  |  |  |  |  |  |
| Course status: |  |  | Elective |  |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |  |  |
| Lectures: |  | Practical classes: |  | Other teaching types: |  | Study research work: |  | Other classes: |  |
|  | 3 | 0 |  | 3 |  | 0 |  | 0 |  |
| Precondition courses None |  |  |  |  |  |  |  |  |  |
| 1. Educational goal: <br> Prepartion of students to use parallel and distributred compter architectures. |  |  |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): <br> Ability of students to use parallel and distributed computer architectures. |  |  |  |  |  |  |  |  |  |
| 3. Course content/structure: <br> Parallelism classification. Parallelism abstractions. Parallelism expression ways and tools. Parallel and distributed computer architecture case studies and their programming characteristics. |  |  |  |  |  |  |  |  |  |
| 4. Teaching methods: <br> Lectures, computer practice. Consultations. Pre exam assignments include four tests and one course project. The final examination test the theoretical part of the course material. The number of points for obtaining a 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 |  |  |  |  |
| Literature |  |  |  |  |  |  |  |  |  |
| Ord. | Author |  |  | Title |  |  | Publisher |  | Year |
| 1, | G.R. ANDREWS |  |  | Foundation of Multithreaded, Parallel and Distributed Programming |  |  | Addison-Wesley |  | 2000 |
| 2, | Y. C. Lin, | Snyder |  | Principles of parallel programming |  |  | Pearson/Addison-Wesley |  | 2008 |

Table 5.2 Course specification

| Course: |  | Domain-Specific Languages |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course id: E2519 |  |  |  |  |
| Number of ECTS: 6 |  |  |  |  |
| Teachers: |  | Dejanović R. Igor, Milanović N. Nikola |  |  |
| Course status: |  | Elective |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |
| Lectures: | Practical classes: | Other teaching types: | Study research work: | Other classes: |
| 3 | 0 | 3 | 0 | 0 |
| Precondition courses |  | None |  |  |

## 1. Educational goal:

To teach students to design and implement software languages intended to be used in the specific domains (Domain-Specific Language DSL) by using modern methods, techniques and tools.

## 2. Educational outcomes (acquired knowledge):

After successfully completing the course the student is able to: understand and effectively utilize the terminology and concepts of the subject area, apply methods and techniques for designing and implementing domain-specific languages??, identify the advantages and disadvantages of various tools for creating domain-specific languages??, analyze arbitrary domain of human activity and recognize the most important concepts and their interdependencies, based on analysis of the domain creates the abstract syntax of the DSL; utilize techniques to create different concrete syntax (graphical, textual, based on tables, dialogs, trees, etc..), identify the most appropriate syntax and implement it using the available tools, understand the impact of cultural and sociological profile of the user to the understandability of the concrete syntax, creates concrete syntaxes of a high degree of usability and readability by using knowledge about the human cognitive abilities.

## 3. Course content/structure:

Theoretical lectures: Basic definitions and concepts; difference between a General Purpose Language (GPL) and Domain Specific Language (DSL). External and internal DSLs. DSL as a set of coordinated models. History and development of DSLs; Traditional and modern notions of DSLs; Impact of DSL usage on productivity. Language Workbenches. Examples of DSLs. Domain analisys. Communication with domain experts; Techniques of recognition of key concepts from the domain description. Techniques of detecting the concepts relations. Abstract syntaxes, abstract syntax definition techniques, meta-modeling. Languages ??for meta-models definition (MOF, ECore, GOPPRR, MoRP). Concrete syntaxes, concrete syntax definition, concrete syntaxes as the interfaces with the user, textual concrete syntaxes (EBNF, Xtext, Emfatic); graphical concrete syntaxes (GMF, Graphite, Spray, Eugenio); automated layouting; Language expressions definition using wizards; Tree-based syntaxes; table-based syntaxes; hybrid syntaxes, cultural and social aspects of creating highly usable and readable concrete syntax; framework of cognitive dimensions and impact of human cognitive abilities on the readability of language expressions. Secondary notation and its impact on the language expression comprehension. The semantics of the language; semantic constraints definition; semantic rules check. Interpreters; dynamic analysis and interpretation of language expression; optimization techniques. Translators - code generators; language expression analysis techniques and code generation for arbitrary target platform; Template engines. Coevolution of language; Horizontal and vertical coevolution; change propagation from higher to lower metalevel, propagation of changes within the same meta-level between the dependent statement. Practical classes: design and creation of DSL for a given domain. The division into project teams. Domain analysis. Extracting key concepts and their relationships. Creating language abstract sy
4. Teaching methods:

Lectures, Computer exercises; Consultation. Design and implementation of project assignment by working within project teams. At the end of the semester, public presentations of the most successful teams are organized with the discussion of the obtained results. The defense of project assignment is oral. The final exam is oral. Final grade is based on the score from the final exam and project defense.

| Knowledge evaluation (maximum 100 points) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-examination obligations |  | Mandatory | Points | Final exam |  | Mandatory | Points |
| Project defence |  | Yes | 50.00 | Oral part of the exam |  | Yes | 50.00 |
| Literature |  |  |  |  |  |  |  |
| Ord. | Author | Title |  |  | Publisher |  | Year |
| 1, | Fowler, M. | Domain-Specific Languages |  |  | Addison-Wesley Professional |  | 2010 |
| 2, | Parr, T. | Language Implementation Patterns: Create Your Own Domain-Specific and General Programming Languages |  |  | The Pragmatic Bookshelf |  | 2009 |
| 3, | Kelly, S. \& Tolvanen, J.-P. | Domain-Specific Modeling: Enabling Full Code Generation |  |  | Wiley-IEEE Computer Society Pr |  | 2008 |
| 4, | Evans, E. | Domain-Driven Design: Tackling Complexity in the Heart of Software |  |  | Addison-Wesley Professional |  | 2004 |
| 5, | Völter, M. \& Stahl, T. | Model-Driven Software Development : Technology, Engineering, Management |  |  | John Wiley \& Sons |  | 2006 |
| 6, | Rubel, D.; Clayberg, E. \& Wren, J. | The Eclipse Graphical Editing Framework (GEF) |  |  | Addison Wesley Professional |  | 2011 |



Table 5.2 Course specification


Table 5.2 Course specification


|  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Table 5.2 Course specification


|  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Table 5.2 Course specification

| Course: |  | Studijsko istraživački rad na teorijskim osnovama diplomskog master rada |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course id: | MROSIR |  |  |  |  |  |  |
| Number of ECTS: | 9 |  |  |  |  |  |  |
| Teachers: |  |  |  |  |  |  |  |
| Course status: |  | Mandatory |  |  |  |  |  |
| Number of active teaching classes (weekly) |  |  |  |  |  |  |  |
| Lectures: | Practical classes: | Other teaching types: |  | Study research work: |  | Other classes: |  |
| 0 | 0 | 0 |  | 9 |  | 0 |  |
| Precondition courses None |  |  |  |  |  |  |  |
| 1. Educational goal: |  |  |  |  |  |  |  |
| 2. Educational outcomes (acquired knowledge): |  |  |  |  |  |  |  |
| 3. Course content/structure: |  |  |  |  |  |  |  |
| 4. Teaching methods: |  |  |  |  |  |  |  |
| Knowledge evaluation (maximum 100 points) |  |  |  |  |  |  |  |
| Pre-examination obligations |  | Mandatory | Points | Final exam |  | Mandatory | Points |
| Literature |  |  |  |  |  |  |  |
| Ord. | Author |  | Title |  | Publisher |  | Year |



Table 5.2 Course specification

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{Course:} \& \multicolumn{5}{|c|}{\multirow{3}{*}{Izrada i odbrana master rada}} <br>
\hline Course id: \& MR0ZMR \& \& \& \& \& <br>
\hline Number of ECTS: \& \& \& \& \& \& <br>
\hline \multicolumn{7}{|l|}{Teachers:} <br>
\hline \multicolumn{7}{|l|}{Course status: $\quad$ Mandatory} <br>
\hline \multicolumn{7}{|l|}{Number of active teaching classes (weekly)} <br>
\hline Lectures: \& Practical classes: \& \multicolumn{2}{|l|}{Other teaching types:} \& Study research work: \& \multicolumn{2}{|l|}{Other classes:} <br>
\hline 0 \& 0 \& \multicolumn{2}{|l|}{0} \& 0 \& \multicolumn{2}{|l|}{8} <br>
\hline \multicolumn{7}{|l|}{Precondition courses None} <br>

\hline \multicolumn{7}{|l|}{| 1. Educational goal: |
| :--- |
| Students acquire the knowledge about the techniques, structure and form of writing a research report after completing analysis and other activities conducted within the given topic of the master thesis. By writing a master thesis students gain the experience of writing papers which require the description of the problem, the methods and procedures in conducting research and the obtained results. In addition, preparation and defence of master thesis has the goal of developing the students` ability to prepare the results of their individual form and present it in a suitable form to a wider audience as well as respond to comments and questions related to the thesis topic. |} <br>

\hline \multicolumn{7}{|l|}{| 2. Educational outcomes (acquired knowledge): |
| :--- |
| Students are able to develop a systematic approach to the given problem, conduct analysis, apply the acquired knowledge and gain knowledge in other areas for the purpose of finding a solution to the given problem. By working independently on solving the given tasks, students gain awareness of the complexity of the problem in their professional field. By working on the master thesis students gain experience which they can use in practice when solving the problems in their professional field. In preparation for defending their results in public and answering the questions and comments of the thesis committee, the student attains the necessary practical experience on how to present the results of their individual or collective work before an audience. |} <br>


\hline \multicolumn{7}{|l|}{| 3. Course content/structure: |
| :--- |
| The content is defined individually, in accordance with the needs and field to be covered by the master thesis. In consultation with the supervisor the student produces the master thesis in written form according to the rules of the Faculty of Technical Sciences. After preparation the student defends the thesis in public as arranged with the thesis supervisor and in accordance with the prescribed rules and procedures. |} <br>


\hline \multicolumn{7}{|l|}{| 4. Teaching methods: |
| :--- |
| During the preparation of the master thesis the student consults with the thesis supervisor, and, if necessary, other professors who work in the area covered by the master thesis. The students writes the paper and, having obtained the approval of the thesis committee, provides them with bound copies of the work. The master thesis is defended in public, and the student is obliged to answer the questions and comments after the oral presentation. |} <br>

\hline \multicolumn{7}{|c|}{Knowledge evaluation (maximum 100 points)} <br>
\hline \multicolumn{2}{|r|}{Pre-examination obligations} \& Mandatory \& Points \& Final exam \& Mandatory \& Points <br>
\hline
\end{tabular}

|  |  |  |
| :---: | :---: | :---: |
|  | - |  |
| Standard 06. Programme Quality, Contemporaneity and International Compliance |  |  |
| The study programme is coordinated with contemporary international scientific trends and state of the professional field and is comparable with similar programmes at higher education institutions abroad, the Measurement and Control Engineering study programme is formed in such a way to be complete and comprehensive and provide students with the latest scientific and professional knowledge in this field. The Measurement and Control Engineering study programme is comparable and coordinated with: <br> 1. Vienna University of Technology, Vienna, Austria <br> ( web site: www.tuwien.ac.at/tu_vienna/ ) <br> 2. Faculty of Electrical Enginering and Information Technology, University of Hannover, Germany <br> ( web site: http://www.et-inf.uni-hannover.de/index.php?id=english-information ) <br> 3. Faculty of Electrical Enginering, Graz University of Technology, Graz, Austria <br> ( web site: http://portal.tugraz.at/portal/page?_pageid=75,2344042\&_dad=portal\&_schema=PORTAL ) <br> 4. http://esn.aau.dk/masters/?L=2 <br> 5. http://www.htwk-leipzig.de/english/fbeitenglish/eitmeng.html <br> 6. http://www.eng.ucy.ac.cy/ECE/en/postgraduate/msprograms.html <br> 7. http://www.it.uu.se/grad/areas <br> 8. http://www.k.dendai.ac.jp/intro/html.en</eng> |  |  |


|  | UNIVERSITY OF NOVI SAD SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA |  |
| :---: | :---: | :---: |
|  | MASTER ACADEMIC STUDIES Measurement and Control Engineering |  |
| Standard 07. Student Enrollment |  |  |
| The Faculty of Technical Sciences, in accordance with social demands and its resources, enrols to undergraduate academic studies of Measurement and Control Engineering on budget funded and self funded studies a certain number of students defined each year by the special decision of the Educational and Scientific Council of the Faculty of Technical Sciences. The selection and enrolment of the applied candidates is based on their success during the previous education and entrance examination as defined by the Book of Rules on Enrolment of Students to Study Programmes. <br> Students from other study programmes and persons who have completed studies can enrol into this study programme. The committee for evaluation (formed by all department heads participating in the realization of the study programme) evaluate all the passed examinations of the candidates and based on the accepted number of points determine the year of studies the candidate can enrol to. The previously passed exam activities can be accepted completely, partially (committee can require a suitable addition) or can be considered inadequate. |  |  |


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| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Standard 08. Student Evaluation and Progress
The final grade in each course included in this programme is formed by continual monitoring of students` accomplishments throughout the academic year and by passing the final examination. 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 within the programme is worth a certain number of ECTS credits which students obtain by successfully passing the course examination. The number of ECTS credits is based on the quantity and quality of work students are required to submit during a certain course and on the Faculty of Technical Sciences` unique methodology for all study programmes. Students` success in mastering a certain course is constantly monitored during classes and is expressed in points. The maximum number of points obtained in a course is 100.
Students obtain points from a course through their work during classes, completion of the pre exam duties and taking the examination. The minimal number of points a student can obtain by fulfilling the course prerequisites during classes is 30 , the maximum 70. Each course at the study programme has a clear and transparent mode of obtaining points. The ways of obtaining points during the classes includes the number of points obtained on the basis of each individual activity during the classes or completing pre exam duties and by passing the course examination.
The final success of students at a course is presented with a grade from 5 (fail) to 10 (excellent). The student's grade is based on the overall number of points obtained by fulfilling pre exam duties and taking the examination, and in accordance with the quality of acquired knowledge and skills.
For students to be able to take a course examination, they have to obtain at least $55 \%$ of the overall number of points through pre exam duties during the semester. Additional requirements for taking the examination are defined separately for every course.
Student advancement during the studies is defined by the Rule book on postgraduate academic studies.

|  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

For the realization of the Measurement and Control Engineering study programme, there is the faculty staff with necessary scientific, artistic and professional qualifications.
The number of teachers is adequate to the needs of the study programme and depends on the number of subjects and the number of classes for those subjects. The total number of staff members is adequate for the total number of classes at the study programme. Of the total number of teachers more than $95 \%$ are employed full time. the number of assistant is adequate for the needs of the study programme. The total number of assistants at the study programme is adequate to cover total number of classes so that the assistants have an average of 300 hours of active classes a year.
All information regarding the teaching staff and assistants (CV, appointments, references) are available to public.
Special attention in this study programme is payed to professional development, promotion and development of teaching staff through participation in national and international symposiums and seminars in order to enhance their knowledge and to improve practices used in teaching.

Science, arts and professional qualifications



Science, arts and professional qualifications



Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Đurić M. Nikola |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 01.10.1997 |  |
| Scientific or art field: |  |  |  |  | Theoretical Electrotechnics |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2010 | Faculty of Technical Sciences - Novi Sad |  | Theoretical Electrotechnics |
| PhD thesis |  |  | 2009 | Faculty of Technical Sciences - Novi Sad |  | Electrical and Computer Engineering |
| Magister thesis |  |  | 2003 | Faculty of Technical Sciences - Novi Sad |  | Electrical and Computer Engineering |
| Bachelor's thesis |  |  | 1997 | Faculty of Technical Sciences - Novi Sad |  | Electrical and Computer Engineering |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | E216 | Fundamentals of Electrical Engineering |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies |
| 2. | EE300 | Electromagnetics |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 3. | H104 | Fundamentals of Electrical Engineering 1 |  |  |  | ( H00) Mechatronics, Undergraduate Academic Studies |
| 4. | H108 | Fundamentals of Electrical Engineering 2 |  |  |  | ( H00) Mechatronics, Undergraduate Academic Studies |
| 5. | M112 | Electrical Engineering and Electric Machines |  |  |  | ( M20) Mechanization and Construction Engineering, Undergraduate Academic Studies <br> ( M30) Energy and Process Engineering, Undergraduate Academic Studies <br> ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies <br> ( P00) Production Engineering, Undergraduate Academic Studies <br> ( S00) Traffic and Transport Engineering, Undergraduate Academic Studies <br> ( S01) Postal Traffic and Telecommunications, Undergraduate Academic Studies |
| 6. | E105 | Fundamentals of Electrical Engineering 1 |  |  |  | ( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies |
| 7. | E110 | Fundamentals of Electrical Engineering 2 |  |  |  | ( E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies <br> ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies |
| 8. | BMI94 | Fundamentals of Electrical Engineering |  |  |  | ( BM0) Biomedical Engineering, Undergraduate Academic Studies |
| 9. | DE416S | Investigation of electromagnetic fields |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 10. | DE517S | Technology of magnetic and optical data storage |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 11. | EE543 | Electro Magnetic Energy |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 12. | E1IEP | Investigation of electromagnetic fields |  |  |  | ( MR0) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 13. | H799 | Fieldbuses and protocols |  |  |  | ( H00) Mechatronics, Master Academic Studies |
| 14. | H845 | Motion control |  |  |  | ( H0O) Mechatronics, Master Academic Studies <br> ( I10) Industrial Engineering, Master Academic Studies |
| 15. | DE416 | Investigation of electromagnetic fields |  |  |  | ( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |  |  |  |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
|  | ID |  | urse name |  |  | ne name, study |  |
| 16. | DE517 |  | chnology of | ata storage |  | tronic and oral Academ | ation |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |  |
| 1. | Đurić 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. | Đurić 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. | Đurić N., Prša M., Kasaš-Lažetić K.: Information Network for Continuous Electromagnetic Fields Monitoring, International Journal of Emerging Sciences - IJES, 2011, Vol. 1, No 4, pp. 516-525, ISSN 2222-4254 |  |  |  |  |  |  |
| 7. | Vukobratović B., Đurić N.: Monitoring of EMF with SEMONT system, 6. International PhD Seminar on Computational electromagnetics and bioeffects of electromagnetic fields - CEMBEF, Novi Sad, 28-30 Jun, 2012, pp. 63-66, ISBN 978-86-7892-410-1 |  |  |  |  |  |  |
| 8. | Bajović V., Đurić N., Herceg D.: Serbian Laws and Regulations as Foundation for Electromagnetic Field Monitoring Information Network, 10. International Conference on Applied Electromagnetics, Niš, 25-29 Septembar, 2011, ISBN ISBN: 978-86-6125-04 |  |  |  |  |  |  |
| 9. | Đurić N., Prša M., Kasaš-Lažetić K., Bajović V.: Serbian Remote Monitoring System for Electromagnetic Environmental Pollution, 10. International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Services - TELSIKS, Niš, 5-8 Oktobar, 2011, pp. 701-704, ISBN 978-1-4577-2016-1 |  |  |  |  |  |  |
| 10. | Đurić 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 |  |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |  |
| Quotation total : |  |  |  | 0 |  |  |  |
| Total of $\mathrm{SCl}(\mathrm{SSCl})$ list papers : |  |  |  | 2 |  |  |  |
| Current projects : |  |  |  | Domestic : | 3 | International : | 2 |

Study Programme Accreditation
MASTER ACADEMIC STUDIES
Measurement and Control Engineering
Science, arts and professional qualifications


|  |  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Study Premic studies | gramm |  | Control Engineering |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
|  | ID | Course name |  |  | Study programme name, study type |  |  |
| 13. | AU502 |  | Distributed Control Systems |  | (E20) Computing and Control Engineering, Master Academic Studies <br> (MRO) Measurement and Control Engineering, Master Academic Studies <br> (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 biomedical systems |  |  | ( BM0) Biomedical Engineering, Master Academic Studies |  |  |
| 17. | E2532 | Automatic Control Systems Project 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 Acquisition Systems |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |  |
| 20. | ESIO30 | Distributed Software Architectures for Smart Energy Grids |  |  | (ESO) Power Software Engineering, Master Academic Studies |  |  |
| 21. | SEAM06 | Integration of Distributed Control Systems |  |  | ( SEO) Software Engineering and Information Technologies, Master Academic Studies |  |  |
| 22. | DAU006 | Selected Chapters in Modeling and Simulation of Dynamic Systems |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |  |
| 23. | DAU018 | Selected Chapters in Distributed Control Systems |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |  |
| 24. | ZRD25A | Selected chapters from Artificial Ingeligence |  |  | ( Z01) Safety at Work, Doctoral Academic Studies |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |  |
| 1. | Lendak I., Erdeljan A., Popović D.: Algorithm for cataloguing topologies in the Common Information Model (CIM), Computers Math. Appl. 61, No. 3, 715-721 (2011). ISSN 0898-1221 |  |  |  |  |  |  |
| 2. | Vukmirović S., Erdeljan A., Čapko D., Lendak I., Nedić N.: Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, 2011, Vol. 4, No 4, pp. 672-679, ISSN 1875-6883 |  |  |  |  |  |  |
| 3. | Čapko D., Erdeljan A., Švenda G., Popović M.: Dynamic Repartitioning of Large Data Model in Distribution Management Systems, Electronics and electrical engineering, 2012, No 4(120), pp. 83-88, ISSN 1392-1215 |  |  |  |  |  |  |
| 4. | llić S., Vukmirović S., Erdeljan A., Kulić F.: Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, 2012, Vol. 16, No S, pp. 215-224, ISSN 0354-9836 |  |  |  |  |  |  |
| 5. | Vukmirović S., Erdeljan A., Čapko D., Lendak I.: Extension of the Common Information Model with Virtual Meter, Electronics and electrical engineering, 2011, Vol. 107, No 1, pp. 59-64, ISSN 1392-1215 |  |  |  |  |  |  |
| 6. | Čapko D., Erdeljan A., Popović M., Švenda G.: An Optimal Initial Partitioning of Large Datasets in Utility Management Systems, Journal of Advances in Electrical and Computer Engineering, 2011, Vol. 11, No 4, pp. 41-46, ISSN 1582-7445 |  |  |  |  |  |  |
| 7. | Čapko D., Erdeljan A., Vukmirović S., Lendak I.: A HYBRID GENETIC ALGORITHM FOR PARTITIONING OF DATA MODEL IN DISTRIBUTION MANAGEMENT SYSTEMS, Information technology and control, 2011, Vol. 40, No 4, pp. 316-322, ISSN 1392124X |  |  |  |  |  |  |
| 8. | Vukmirović S., Nedić N., Erdeljan A., Lendak I., Čapko D.: A Genetic Algorithm Approach for Utility Management System Workflow Scheduling, Information technology and control, 2010, Vol. 39, No 4, pp. 310-316, ISSN 1392-124X |  |  |  |  |  |  |
| 9. | Vukmirović S., Erdeljan A., Lendak I., Čapko D.: A novel software architecture for Smart Metering systems, Journal of Scientific and Industrial Research (JSIR), 2010, Vol. 2010, No 12, pp. 937-941, ISSN 0022-4456 |  |  |  |  |  |  |
| 10. | 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 |  |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |  |
| Quotation total : |  |  |  | 1 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  |  | 9 |  |  |  |
| Current projects : |  |  |  | Domestic : | 3 | International | 0 |

Science, arts and professional qualifications


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme Accreditation <br> Measurement and Control Engineering |  |  |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 2. | Hajduković M., "Organizacija računara", Pomoćni 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 udžbenik, Fakultet tehničkih nauka, 2004. |  |  |  |  |  |
| 5. | Hajduković M., "Arhitektura računara", Osnovni udžbenik, Fakultet tehničkih nauka, 2004. |  |  |  |  |  |
| 6. | Hajduković M. i ostali, "The active side principle approach to the client server protocol design", YUJOR, vol. 6, no. 1, Belgrade, 1996., 121-127 |  |  |  |  |  |
| 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 oriented program editing - habit or necessity?", NSJOM, vol. 33, no. 1, Novi Sad, 2003., 53-65 |  |  |  |  |  |
| 10. | Hajduković M. između ostalih, "A problem of program execution time measurement", NSJOM, vol. 33, no. 1, Novi Sad, 2003., 6773 |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 11 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  | 3 |  |  |  |
| Current projects : |  |  | Domestic : | 1 | International : | 0 |

Study Programme Accreditation

Science, arts and professional qualifications



Science, arts and professional qualifications


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |  |  |  |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
|  | ID | Course name |  |  | Study programme name, study type |  |  |
| 19. | DAU005 | Selected Chapters in Optimization Methods |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |  |
| 1. | Jeličić Z., Kulić F., Čongradac V., Kanović Ž., Živković S.,Praktikum Savremena merenja i instrumentacija iz programa Lifelong Learning, INDAS, 2003. |  |  |  |  |  |  |
| 2. | Jeličić Zoran; Petrovački Nebojša; Optimality Conditions and a Solution Scheme For Fractional Optimal Control Problems, Structural and Multidisciplinary Optimization ISSN: 1615-147X ,Vol. 38, No. 6, Str. 571-581, Springer; |  |  |  |  |  |  |
| 3. | Rapaić Milan; Pisano Alessandro; Jelicicić Zoran; Usai Elio; Sliding mode control approaches to the robust regulation of linear multivariable fractional order dynamics - International Journal of Robust and Nonlinear Control Volume 20, Issue 18, pages 2045-2056, December 2010 |  |  |  |  |  |  |
| 4. | Rapaić Milan; Jeličić Zoran; Optimal control of a class of fractional heat diffusion systems, Nonlinear Dynamics Volume 62,Numbers 1-2, 39-51, DOI: 10.1007/s11071-010-9697-3, Springer; |  |  |  |  |  |  |
| 5. | Z. D. Jeličić, T. M. Atanacković, Optimal shape of a vertical rotating column, International Journal of Non-Linear Mechanics, 42, 172-179, (2007). |  |  |  |  |  |  |
| 6. | Zeljko Kanovic, Milan R Rapaic, Zoran D Jelicic, Generalized particle swarm optimization algorithm-Theoretical and empirical analysis with application in fault detection, Applied mathematics and computation, Volume 217, Issue 24, 15 August 2011, Pages 10175-10186. |  |  |  |  |  |  |
| 7. | Jeličić, Z. D. Atanacković, T. M.,On an optimization problem for elastic rods, STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, (2006) vol. 32 br. 1 str. 59-64 |  |  |  |  |  |  |
| 8. | Milena Petković, Milan R Rapaić, Zoran D Jeličić, Alessandro Pisano, On-line adaptive clustering for process monitoring and fault detection, Expert Systems with Applications, Volume 39, Issue 11, 1 September 2012, Pages 10226-10235. |  |  |  |  |  |  |
| 9. | T. M. Atanacković, Z. D. Jelicićć, Optimal shape and deformations of a lifting line with winglets. Bulletin de l"Académie Serbe des Sciences et des Arts. Classe des Sciences techniques 29, 57-79 (2003). |  |  |  |  |  |  |
| 10. | T. M. Atanackovic, Y. Huo, Z. Jelicic, I. Mueller, Phase diagrams modified by interfacial penalties, Theoret. Appl. Mech., Vol.34, No.4, pp. 301-338, Belgrade 2007. |  |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |  |
| Quotation total : |  |  |  | 105 |  |  |  |
| Total of SCl(SSCI) list papers : |  |  |  | 7 |  |  |  |
| Current projects : |  |  |  | Domestic : | 2 | International | 1 |

Study Programme Accreditation

Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Kovačević V. Jelena |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 01.12.1999 |  |
| Scientific or art field: |  |  |  |  | Computer Engineering and Computer Communication |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2011 | Faculty of Technical Sciences - Novi Sad |  | Computer Engineering and Computer Communication |
| PhD thesis |  |  | 2010 | Faculty of Technical Sciences - Novi Sad |  | Computer Engineering and Computer Communication |
| PhD thesis |  |  | 2010 |  |  | Computer Engineering and Computer Communication |
| Magister thesis |  |  | 2003 | Faculty of Technical Sciences - Novi Sad |  | Computer Engineering and Computer Communication |
| Bachelor's thesis |  |  | 1997 | Faculty of Technical Sciences - Novi Sad |  | Computer Engineering and Computer Communication |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
| ID |  | Course name |  |  |  | Study programme name, study type |
| 1. | RT44 | DSP Architecture and Algorithms 1 |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MR0) Measurement and Control Engineering, <br> Undergraduate Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 2. | RT46 | DSP Architecture and Algorithms 2 |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MR0) Measurement and Control Engineering, <br> Undergraduate Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies - <br> Loznica, Undergraduate Academic Studies |
| 3. | RT52 | Dedicated Computer Structure Design 2 |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> (SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies |
| 4. | IGB340 | Fundamentals of Engineering Animation |  |  |  | ( F10) Engineering Animation, Undergraduate Academic Studies |
| 5. | EK465 | Architectures of digital signal processors |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 6. | RT59 | Real-Time System Design |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MR0) Measurement and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 7. | RT511 | Practicum in computer engineering and computer communications |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies |
| 8. | DRT06 | Selected chapters on DSP systems |  |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |

STAS STUN

Science, arts and professional qualifications


Science, arts and professional qualifications


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programm <br> MASTER ACADEMIC STUDIES | creditation <br> Measurement and Control Engineering |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |
|  | ID | Course name | Study programme name, study type |  |
| 14. | E2515 | Intelligent Control Systems | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (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 | ( SEO) 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 <br> ( OM1) Mathematics in Engineering, Doctoral Academic Studies |  |
| 20. | SID04 | Current State in the Field | ( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies <br> (E20) Computing and Control Engineering, Doctoral Academic Studies <br> ( F00) Graphic Engineering and Design, Doctoral Academic Studies <br> ( F20) Engineering Animation, Doctoral Academic Studies ( G00) Civil Engineering, Doctoral Academic Studies ( GIO) Geodesy and Geomatics, Doctoral Academic Studies ( H00) Mechatronics, Doctoral Academic Studies ( I20) Industrial Engineering / Engineering Management, Doctoral Academic Studies <br> ( MOO) Mechanical Engineering, Doctoral Academic Studies ( OM1) Mathematics in Engineering, Doctoral Academic Studies <br> ( SOO) 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 |  |
| 22. | SID04 | Present State in the Field | ( A00) Architecture, Doctoral Academic Studies( AS0) Scenic Design, Doctoral Academic Studies( Z01) Safety at Work, Doctoral Academic Studies |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |
| 1. | Dragan Kukolj, Vesna Bengin, Filip Kulić: Osnovi klasične teorije automatskog upravljanja kroz rešene probleme, Sombor, Somel, 1995. 241str., UDK: 681.5(075.8), |  |  |  |
| 2. | Dragan Kukolj, Filip Kulić: Projektovanje sistema automatskog upravljanja u prostoru stanja, Novi Sad, Fakulet tehničkih nauka, 1995. 232str., UDK: 681.5(075.8), |  |  |  |
| 3. | D.Kukolj, F.Kulić, E.Levi: Design Of The Speed Controller For Sensorless Electric Drives Based On Al Techniques: A Comparative Study, Artificial Intelligence in Engineering, 2000, Vol. 14, str. 165-174 |  |  |  |
| 4. | D.Kukolj, S.Kuzmanović, E.Levi, F.Kulić: Design of Near Optimal, Wide Range Fuzzy Logic Controller, Fuzzy Sets and Systems, 2001, Vol. 120, No. 1, str. 17- 34 |  |  |  |
| 5. | D.Kukolj, F.Kulić, D.Popović, Z.Gorečan: Determining Topological Changes and Critical Load Levels of a Power System by Means of Artificial Neural Network, Electric Machines and Power Systems, 1997, Vol. 25, No. 8, str. 917-926, ISSN 0731-356x. |  |  |  |
| 6. | D.Kukolj, D.Popović, F.Kulić, Z.Gorečan: Fast Dynamic Stability Analysis of a Power System Using Artificial Neural Networks, European Transactions on Electrical Power (ETEP), 1998, Vol. 8, No. 3, str. 207- 212, ISSN 1430-144X. |  |  |  |
| 7. | D.Popović, D.Kukolj, F.Kulić: Monitoring and Assessment of Voltage Stability Margins Using Artificial Neural Networks with a Reduced Input Set, IEE Proc. -Gener. Transm. Distrib, 1998, Vol. 145, No. 4, str. 355-362, ISSN 1350-2360. |  |  |  |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MASTER A | rograr |  | Control En |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 8. | Matić Dragan, Kulić Filip, Pineda-Sanchez Manuel, Kamenko llija: "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. | Ilić 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 |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 32 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  | 12 |  |  |  |
| Current projects : |  |  | Domestic : | 2 | International : | 0 |

## Study Programme Accreditation

Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Lazarević M. Milovan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 11.11.2000 |  |
| Scientific or art field: |  |  |  |  | Production Systems, Organization and Management |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2010 | Faculty of Technical Sciences - Novi Sad |  | Production Systems, Organization and Management |
| PhD thesis |  |  | 2009 | Faculty of Technical Sciences - Novi Sad |  | Engineering Management |
| Magister thesis |  |  | 2006 | Faculty of Technical Sciences - Novi Sad |  | Production Systems, Organization and Management |
| Bachelor's thesis |  |  | 2000 | Faculty of Technical Sciences - Novi Sad |  | Production Systems, Organization and Management |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
| ID |  | Course name |  |  |  | Study programme name, study type |
| 1. | EOS19 | Dismantling and recycling technologies |  |  |  | ( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies |
| 2. | M316 | Production Systems |  |  |  | ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies <br> ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies |
| 3. | 111012 | Assembly Technologies |  |  |  | ( I10) Industrial Engineering, Undergraduate Academic Studies |
| 4. | 111017 | Production System Design |  |  |  | ( I10) Industrial Engineering, Undergraduate Academic Studies |
| 5. | 111037 | Disassembly and recycling technologies |  |  |  | ( I10) Industrial Engineering, Undergraduate Academic Studies |
| 6. | 111053 | Production Systems |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies <br> ( P00) Production Engineering, Undergraduate Academic Studies |
| 7. | IM1027 | Production systems |  |  |  | ( I20) Engineering Management, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies |
| 8. | IM1114 | Energy Flows in the Enterprise |  |  |  | (I20) Engineering Management, Undergraduate Academic Studies |
| 9. | IM1119 | Product management at end of life |  |  |  | (I20) Engineering Management, Undergraduate Academic Studies |
| 10. | El504 | Management of Small and Medium Enterprises |  |  |  | ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 11. | IMDR0S | Selected chapters in enterprise's design, organization and control |  |  |  | ( I12) Industrial Engineering, Specialised Academic Studies ( I22) Engineering Management, Specialised Academic Studies |
| 12. | IMDS56 | Product traceability during the lifetime |  |  |  | ( 112) Industrial Engineering, Specialised Academic Studies |
| 13. | IMDS57 | Strategic Planning and Designing Procedures and Systems at the End of Product Lifecycle |  |  |  | ( I12) Industrial Engineering, Specialised Academic Studies |
| 14. | IMDS93 | Virtual Enterprises and Collaborative Systems |  |  |  | ( I22) Engineering Management, Specialised Academic Studies |
| 15. | MBA411 | Business intelligence concepts |  |  |  | ( I20) Engineering Management, Specialised Professional Studies <br> ( IB0) Engineering Management - MBA, Specialised Professional Studies |
| 16. | PLM02 | Product Development and Management in PLM |  |  |  | ( I10) Industrial Engineering, Master Academic Studies ( IIU) Industrial Engineering - Product Lifecycle Management and Development, Master Academic Studies |



Science, arts and professional qualifications



Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: | Luković S. Ivan |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Academic title: | Full Professor |
| Name of the institution where the teacher works full time and <br> starting date: | Faculty of Technical Sciences - Novi Sad |
| Scientific or art field: | 18.05.1991 |



Study Programme Accreditation

Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Marković -. Milan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Guest Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | - |  |
| Scientific or art field: |  |  |  |  | Computer Science |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  |  |  |  |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | D | Course name |  |  |  | Study programme name, study type |
| 1. | E233 | Internet Networks |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies <br> (SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 2. | F501 | WEB Design |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies <br> ( F10) Engineering Animation, Undergraduate Academic Studies |
| 3. | ISIT28 | Informaciona bezbednost |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 4. | BMI95 | Introduction to Computer Science |  |  |  | ( BMO) Biomedical Engineering, Undergraduate Academic Studies |
| 5. | SE0001 | Introduction to Programming |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> ( P00) Production Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 6. | SE0011 | Introduction to Software Engineering |  |  |  | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 7. | SE0017 | Software Development Metrodologies |  |  |  | ( P00) Production Engineering, Undergraduate Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 8. | SE0024 | Software Construction and Testing |  |  |  | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 9. | SE239A | Web programming |  |  |  | ( P00) Production Engineering, Undergraduate Academic Studies <br> (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |



Study Programme Accreditation

Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Milanović N. Nikola |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | - |  |
| Scientific or art field: |  |  |  |  | Applied Computer Science and Informatics |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2010 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| PhD thesis |  |  | 2003 |  |  | Applied Computer Science and Informatics |
| Bachelor's thesis |  |  | 1995 |  |  | Applied Computer Science and Informatics |
| Magister thesis |  |  | - |  |  | Applied Computer Science and Informatics |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | F209 | Multimedia |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies |
| 2. | ISIT21 | Internet mreže |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 3. | ISIT2D | Web design |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 4. | SE0008 | Algorithms and Data structures |  |  |  | ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 5. | SE0016 | Databases |  |  |  | ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 6. | SES102 | NoSQL Data Bases |  |  |  | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 7. | SES201 | Advanced Web Technologies |  |  |  | ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 8. | SES302 | High Technology Management |  |  |  | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 9. | E2506 | Advanced Internet Infrastructure |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 10. | E2513 | Semantic Web |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( PMO) Production Engineering, Master Academic Studies <br> ( SEO) Software Engineering and Information Technologies, <br> Master Academic Studies |



Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Milosavljević P. Branko |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Associate Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 01.10.1998 |  |
| Scientific or art field: |  |  |  |  | Applied Computer Science and Informatics |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2009 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| PhD thesis |  |  | 2003 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| Magister thesis |  |  | 1999 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| Bachelor's thesis |  |  | 1997 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | E2E40 | XML and WEB Services |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> (SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 2. | E2E41 | E-Business Systems Security |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 3. | F209 | Multimedia |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies |
| 4. | F214I2 | Raster Graphics |  |  |  | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies |
| 5. | GI100 | Computer Practicum |  |  |  | ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies |
| 6. | RI41 | Internet Software Architectures |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies |
| 7. | SEI41 | Internet Software Architectures |  |  |  | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 8. | ISIT03 | Introduction to Programming |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 9. | ISIT08 | Object oriented programming fundamentals |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 10. | ISIT22 | Osnove baza podataka |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 11. | ISIT28 | Informaciona bezbednost |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 12. | ISIT29 | XML Technologies |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |
| 13. | BMI95 | Introduction to Computer Science |  |  |  | ( BMO) Biomedical Engineering, Undergraduate Academic Studies |
| 14. | EIWDS | Web-based Measurement and Data Acquisition Systems |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programm <br> MASTER ACADEMIC STUDIES | creditation <br> Measurement and Control Engineering |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |
|  | ID | Course name | Study programme name, study type |  |
| 15. | SE0001 | Introduction to Programming | ( F00) Graphic Engineering and Design, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> ( P00) Production Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 16. | E2506 | Advanced Internet Infrastructure | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 17. | F402 | Electronic Publishing | ( F00) Graphic Engineering and Design, Master Academic Studies |  |
| 18. | E2521 | Business Process Management | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 19. | E2526 | Service Oriented Architectures | (E20) Computing and Control Engineering, Master Academic Studies <br> (SEO) 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 |  |
| 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 DataIntensive 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 8998. Trinity College Dublin, 2003. |  |  |  |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MASTER A | ograr |  | n <br> and Control |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 6. | 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. |  |  |  |  |  |
| 7. | Jelena Radjenović, Branko Milosavljević, and Dušan Surla. Modelling and implementation of catalogue cards using FreeMarker. Program: electronic library and information systems, 43(1):62-76, 2009. ISSN: 0033-0337, DOI: 10.1108/00330330910934110. |  |  |  |  |  |
| 8. | 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: 18200214, DOI: 10.2298/csis0902001V. |  |  |  |  |  |
| 9. | Aleksandar Kovačević, Branko Milosavljević, Zora Konjović, and Milan Vidaković. Adaptive content-based music retrieval system. Multimedia Tools and Applications, 47(3):525-544, 2010. ISSN: 1380-7501, DOI: 10.1007/s11042-009-0336-2. |  |  |  |  |  |
| 10. | Bojana Dimić, Branko Milosavljević, and Dušan Surla. XML schema for UNIMARC and MARC 21. The Electronic Library, 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 : | 1 |

Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Mitrović Lj. Zoran |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Associate Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 20.04.1994 |  |
| Scientific or art field: |  |  |  |  | Electrical Measurements |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2009 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| PhD thesis |  |  | 2004 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| Magister thesis |  |  | 1992 | School of Electrical Engineering - Beograd |  | Electrical and Computer Engineering |
| Bachelor's thesis |  |  | 1984 | School of Electrical Engineering - Beograd |  | Electronics |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | E142 | Measuring Instruments |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 2. | El411 | Measurements in robotics |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 3. | EIDMS1 | Microprocessor based measurement and data acquisition systems 1 |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 4. | EIDMS2 | Microprocessor based measurement and data acquisition systems 2 |  |  |  | ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 5. | EIPDMS | Programming of Measurement and Data Acquisition Systems |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 6. | EIPMS1 | Design and development of industrial devices and measurement systems 1 |  |  |  | ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 7. | EIPMS2 | Design and development of industrial devices and measurement systems 2 |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 8. | EIPR1 | Laboratory practicum |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 9. | EISMP | Sensors and transducers |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 10. | EIWDS | Web-based Measurement and Data Acquisition Systems |  |  |  | ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 11. | EZ302 | Measurement systems in clean power sources |  |  |  | ( ZCO) Clean Energy Technologies, Undergraduate Academic Studies |
| 12. | MROUL $\mathrm{R}$ | Introduction to laboratory practice |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies |
| 13. | DE504S | Contemporary Measuring Systems Design |  |  |  | E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 14. | E1SO01 | Modern technologies in electrical engineering |  |  |  | ( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies |
| 15. | EIDNU | Supervisory Control and Data Acquisition Systems Design |  |  |  | ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme Accreditation |  |  |  |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  | Study programme name, study type |  |  |
| 16. | EIMIO | Measurement systems in industrial environment |  | ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |  |
| 17. | EIMRV1 | Real Time Measurements |  | ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |  |
| 18. | DE504 | Contemporary Measuring Systems Design |  | (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 1. | Antić B., Mitrović Z., Vujicicić V.: Method for Harmonic Measurement of Real Power Grid Signals with Frequency Drift using Instruments with InternallyGenerated Reference Frequency, Measurement Science Review, 2012, Vol. 12, No 6, pp. 277-285, ISSN 1335-8871 |  |  |  |  |  |
| 2. | Zoran Mitrović: "A Phase Angle Standard", Measurement Science and Technology No. 15. Institute of Physics , January 2004, 559-564. |  |  |  |  |  |
| 3. | Mitrović Z., Milovančev S., Župunski I.: A Precision Power Amplifier for Calibration Systems, Measurement Science and Technology, 2009, Vol. 20, No 6, pp. 1-3 |  |  |  |  |  |
| 4. | Santrač B., Sokola M., Mitrović Z., Župunski I., Vujičić V.: A Novel Method for Stochastic Measurement of Harmonics at Low Signal-to-Noise Ratio, IEEE Transactions on Instrumentation and Measurement, 2009, Vol. 58, No 10, pp. 3434-3441, ISSN 00189456 |  |  |  |  |  |
| 5. | Trkuljić N., Babić Z., Marković R., Peruničić G., Sarić M., Spasić Jokić V., Mitrović Z.: Implementation of the Modern PACS System at the Institute of Oncology and Radiology of Serbia, Medical Data, 2011, No 1, pp. 69-72, ISSN 1821-1585, UDK: 61607:621.39(497.11) |  |  |  |  |  |
| 6. | Mitrović Z., Spasić Jokić V.: Introduction in Picture Archiving and Communication System (PACS) in Medicine: DICOM (Digital Imaging and Communications in Medicine), Medical Data, 2010, No 2, pp. 123-126, ISSN 1821-1585, UDK: 61:004 |  |  |  |  |  |
| 7. | Zoran Mitrović, Ivan Župunski:"Stable Source of AC Voltage and Current", IMTC Conference, Como, Italy, 2004. |  |  |  |  |  |
| 8. | Nagy K., Vujicić V., Mitrović Z., Takacs M.: Fuzzyfication and measurement using stochastic approach, 7. SISY - International Symposium on Intelligent systems and Informatics, Subotica, 25-26 Septembar, 2009, pp. 47-49, ISBN 978-1-4244-1442-0 |  |  |  |  |  |
| 9. | Zoran Mitrović: "Prilog razvoju etalona faznog ugla", doktorska disertacija, Fakultet tehničkih nauka, Novi Sad, 1985. |  |  |  |  |  |
| 10. | P. Miljanić Z. Mitrović, I. Župunski, V. Vujičić: "Ka novom etalonu naizmeničnog napona, struje, električne snage i energije i faktora snage - rezultati ispitivanja", Kongres metrologa 2003, Beograd, Plenarni rad po pozivu |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 0 |  |  |  |
| Total of SCl(SSCl) list papers |  |  | 4 |  |  |  |
| Current projects : |  |  | Domestic : | 3 | International | 0 |

Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  | Pap I. Ištvan |
| :--- | :--- | :--- | :--- | :--- |
| Academic title: | Assistant Professor |  |  |
| Name of the institution where the teacher works full time and <br> starting date: | - |  |  |
|  | Year |  |  |
| Scientific or art field: | Institution | Computer Engineering and Computer Communication |  |
| Academic carieer | Year | Field |  |
| Academic title election: | 2010 |  | Computer Engineering and Computer <br> Communication |
| PhD thesis | 2009 | Faculty of Technical Sciences - Novi Sad | Computer Engineering and Computer <br> Communication |
| PhD thesis | 2008 |  | Computer Engineering |
| Magister thesis | 2001 | Faculty of Technical Sciences - Novi Sad | Computer Science |
| Bachelor's thesis | 1998 | Faculty of Technical Sciences - Novi Sad | Computer Science |
| List |  |  |  |

List of courses being held by the teacher in the accredited study programmes

|  | ID | Course name | Study programme name, study type |
| :---: | :---: | :---: | :---: |
| 1. | RT43 | Engineering of Computer Based Systems | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies |
| 2. | RT52A | Dedicated Computer Structure Design 1 | ( E20) Computing and Control Engineering, Undergraduate Academic Studies |
| 3. | RT52B | Dedicated Computer Structure Design for Signal Processing | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 4. | SE1006 | Object Oriented Programming 2 | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 5. | SERT03 | Embedded system design 1 | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies |
| 6. | RT59 | Real-Time System Design | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 7. | RT511 | Practicum in computer engineering and computer communications | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Master Academic Studies |
| 8. | DRT10 | Selected chapters of embedded computer based systems | ( E20) Computing and Control Engineering, Doctoral Academic Studies |
| Representative refferences (minimum 5, not more than 10) |  |  |  |
| 1. | Pap I., Lukić N., Marčeta Z., Teslić N., Schu M.: Real-time video quality assessment platform, 27. International Conference on Consumer Electronics, Las Vegas: IEEE Consumer Electronics Society, , pp. 1-2, ISBN 978-1-4244-4701-5, UDK: <br> 10.1109/ICCE.2009.5012206 |  |  |
| 2. | Mrazovac B., Bjelica M., Pap I., Teslić N.: Smart audio/video playback control based on presence detection and user localization in home environment |  |  |
| 3. | Mrazovac B., Bjelica M., Teslić N., Pap I.: Towards Ubiquitous Smart Outlets for Safety and Energetic Efficiency of Home Electric Appliances, 1. IEEE International Conference on Consumer Electronics - Berlin (ICCE-Berlin), Berlin: IEEE Consumer Electronic Society, 6-8 Oktobar, 2011, pp. 324-328, UDK: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6031795 |  |  |
| 4. | Pap I., Šarić Z., Vukosavljev S., Teslić N., Temerinac M.: Hands-free Voice Communication Platform Integrated With TV, 27. International Conference on Consumer Electronics, Las Vegas: IEEE Consumer Electronics Society, , pp. 1-2, ISBN 978-1-4244-4701-5, UDK: 10.1109/ICCE.2009.5012265 |  |  |
| 5. | Pap I., Šarić Z., Teslić N.: Hands-free Voice Communication with TV, IEEE Transactions on Consumer Electronics, 2011, Vol. 57, No 2, pp. 606-614, ISSN 0098-3063, UDK: doi: 10.1109/TCE.2011.5955198 |  |  |



Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Perišić R. Branko |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Associate Professor |  |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |  |
|  |  |  |  |  | 01.04.1983 |  |  |
| Scientific or art field: |  |  |  |  | Applied Computer Science and Informatics |  |  |
| Academic carieer |  |  | Year | Institution |  |  | Field |
| Academic title election: |  |  | 2011 | Faculty of Technical Sciences - Novi Sad |  |  | Applied Computer Science and Informatics |
| Education Specialist Thesis |  |  | 2007 | Software Engineering Institute at Carnagie Mellon University - Pittsburgh |  |  | Computer Science |
| Education Specialist Thesis |  |  | 2004 | Software Engineering Institute at Carnagie Mellon University - Pittsburgh |  |  | Computer Science |
| PhD thesis |  |  | 1994 | Faculty of Technical Sciences - Novi Sad |  |  | Applied Computer Science and Informatics |
| Magister thesis |  |  | 1986 | Faculty of Technical Sciences - Novi Sad |  |  | Applied Computer Science and Informatics |
| Bachelor's thesis |  |  | 1977 | Faculty of Electrical Engineering - Sarajevo |  |  | Electrical and Computer Engineering |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
| ID |  | Course name |  |  |  | Study programme name, study type |  |
| 1. | E235 | Fundamentals of Information Systems and Software Engineering |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( F10) Engineering Animation, Undergraduate Academic Studies <br> ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies |  |
| 2. | E242 | Software Specification and Modeling |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 3. | E2S40 | Software Patterns and Components |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies |  |
| 4. | RI45 | Software Design |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 5. | RI53 | Business Information Systems |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 6. | ISIT22 | Osnove baza podataka |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |  |
| 7. | ISIT26 | Upravljanje projektima |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |  |
| 8. | ISIT28 | Informaciona bezbednost |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |  |
| 9. | ISIT2E | Osnove projektovanja softvera |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |  |
| 10. | ISIT33 | Integracija i verifikacija softverskih aplikacija |  |  |  | ( SII) Software and Information Technologies (Inđija), Undergraduate Professional Studies |  |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme MASTER ACADEMIC STUDIES | creditation <br> Measurement and Control Engineering |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |
|  | ID | Course name | Study programme name, study type |  |
| 11. | SE0011 | Introduction to Software Engineering | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 12. | SE0017 | Software Development Metrodologies | ( P00) Production Engineering, Undergraduate Academic Studies <br> (SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 13. | SES103 | Oral and written communication skills | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 14. | SES40 | Software patterns and components | ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 15. | E2508 | Agile Software Development Methodology | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies |  |
| 16. | E2509 | Protection and Recovery of Software Systems | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MR0) Measurement and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 17. | GS014 | The application of information technologies in energy efficiency | ( G10) Energy Efficiency in Buildings, Specialised Academic Studies |  |
| 18. | E2522 | Software Standardization and Quality | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> ( SE0) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 19. | DRNI05 | Selected Topics in Software Standardization and Quality | ( E20) Computing and Control Engineering, Doctoral Academic Studies <br> ( F20) Engineering Animation, Doctoral Academic Studies |  |
| 20. | DRNI08 | Selected Topics in Information Systems | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |
| 21. | DAU014 | Selected Topics in Computing | ( E20) Computing and Control Engineering, Doctoral Academic Studies <br> ( OM1) Mathematics in Engineering, Doctoral Academic Studies |  |
| 22. | DRNI12 | Selected Topics in Contemporary Software Development Methods | ( E20) Computing and Control Engineering, Doctoral Academic Studies <br> ( F20) Engineering Animation, Doctoral Academic Studies |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |
| 1. | B. Perišić, G. Milosavljević "A Method and Tool for Rapid Prototyping of Large Scale Business Information Systems" COMSIS 2004 |  |  |  |
| 2. | Perišić B., Milosavljević G., Dejanović I., Milosavljević B.: UML Profile for Specifying User Interfaces of Business Applications, Computer Science and Information Systems (ComSIS), 2011, Vol. 8, No 2, pp. 405-426, ISSN 1820-0214 |  |  |  |
| 3. | Dejanović I., Milosavljević G., Tumbas Živanov M., Perišić B.: A Domain-Specific Language for Defining Static Structure of Database Applications, Computer Science and Information Systems (ComSIS), 2010, Vol. 7, No 3, pp. 409-440, ISSN 1820-0214 |  |  |  |



Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  | Petrovački Lj. Nebojša |
| :--- | :--- | :--- | :--- | :--- |
| Academic title: | Assistant Professor |  |  |
| Name of the institution where the teacher works full time and <br> starting date: | - |  |  |
|  |  |  |  |
| Scientific or art field: | Year | Institution | Automatic Control and System Engineering |
| Academic carieer | 2009 | Faculty of Technical Sciences - Novi Sad | Automatic Control and System Engineering |
| Academic title election: | 2008 | Faculty of Technical Sciences - Novi Sad | Automatic Control and System Engineering |
| PhD thesis | 2008 | University of California, Los Angeles - Los <br> Angeles | Automatic Control and System Engineering |
| Magister thesis | 2005 | Faculty of Technical Sciences - Novi Sad | Automatic Control and System Engineering |
| Bachelor's thesis | 2000 |  |  |

List of courses being held by the teacher in the accredited study programmes

|  | ID | Course name | Study programme name, study type |
| :---: | :---: | :---: | :---: |
| 1. | E226 | Automatic Control Systems | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( HOO) Mechatronics, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, <br> Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |
| 2. | E238A | Control Systems Technology | ( BMO) Biomedical Engineering, Undergraduate Academic Studies <br> ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, <br> Undergraduate Academic Studies |
| 3. | M3408 | Automatic Control Systems | ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies |
| 4. | BMI125 | Biological Control Systems | ( BMO) Biomedical Engineering, Undergraduate Academic Studies |
| 5. | EMSAU | Automatic Control Systems in Electronics | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 6. | GG226 | Automatic control systems in geomatics | ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies |
| 7. | GG99 | Geospatial technologies - basics | ( ZPO) Disaster Risk Management and Fire Safety, Undergraduate Academic Studies |
| 8. | M3409 | Automatic control systems | ( M30) Energy and Process Engineering, Undergraduate Academic Studies |
| 9. | AU509 | Nonlinear Control Systems | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies |
| 10. | GIAU01 | Geosensor networks | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 11. | M3417 | Applied industrial automatization | ( M30) Energy and Process Engineering, Master Academic Studies |
| 12. | DGI018 | Selected Chapters of Automatic Control Systems | ( GIO) Geodesy and Geomatics, Doctoral Academic Studies |
| Representative refferences (minimum 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 nauka u Novom Sadu, Novi Sad, decembar 2008. godine. |  |  |



## Study Programme Accreditation

Science, arts and professional qualifications



Study Programme Accreditation

Science, arts and professional qualifications


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Study Prog <br> MASTER ACADEMIC STUDIES | ccreditation <br> Measurement and Control Engineering |  |
| 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 <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 12. | SE0024 | Software Construction and Testing | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 13. | SES103 | Oral and written communication skills | ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 14. | E2501 | Electronic Payment Systems | ( E20) Computing and Control Engineering, Master Academic Studies <br> (SEO) Software Engineering and Information Technologies, Master Academic Studies |  |
| 15. | EP007 | Document and content management | ( I20) Engineering Management, Specialised Professional Studies <br> ( IBO) Engineering Management - MBA, Specialised Professional Studies |  |
| 16. | E2522 | Software Standardization and Quality | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MRO) Measurement and Control Engineering, Master Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 17. | SEM009 | Identity Management | ( SEO) Software Engineering and Information Technologies, Master Academic Studies |  |
| 18. | SEM013 | E-government technologies | ( SEO) Software Engineering and Information Technologies, Master Academic Studies |  |
| 19. | SEM017 | Information Security | (SEO) Software Engineering and Information Technologies, Master Academic Studies |  |
| 20. | DRNIO3 | 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 <br> ( OM1) Mathematics in Engineering, Doctoral Academic Studies |  |
| 22. | DRNI19 | Selected Topics in Information Security | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |
| 1. | Sladić G., Milosavljević B., Surla D., Konjović Z.: Flexible Access Control Framework for MARC Records, The Electronic Library, 2012, Vol. 30, No 5, pp. 623-652, ISSN 0264-0473, DOI:10.1108/02640471211275684 |  |  |  |
| 2. | Gostojić S., Sladić G., Milosavljević B., Konjović Z.: Context-sensitive Access Control Model for Government Services, Journal of Organizational Computing and Electronic Commerce, 2012, Vol. 22, No 2, pp. 184-213, ISSN 1091-9392, DOI:10.1080/10919392.2012.667717 |  |  |  |
| 3. | Sladić G., Milosavljević B., Konjović Z., Vidaković M.: Access Control Framework for XML Document Collections, Computer Science and Information Systems (ComSIS), 2011, Vol. 8, No 3, pp. 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 Distributed Library Catalogues, Computer Science and Information Systems (ComSIS), 2009, Vol. 6, No 2, pp. 1-28, ISSN 18200214, DOI: 10.2298/csis0902001V |  |  |  |
| 5. | Sladić G., Milosavljević B., Konjović Z.: Extensible Access Control Model for XML Document Collections, 1. International Conference on Security and Cryptology - SECRYPT, Barcelona: INSTICC, 28-31 Jul, 2007, pp. 373-380, ISBN 9789898111128 |  |  |  |
| 6. | Sladić G.: Kontrola pristupa u poslovnim sistemima, Beograd, Zadužbina Andrejević, 2011, ISBN 978-86-525-0000-0 |  |  |  |
| 7. | Sladić G.: Kontrola pristupa XML dokumentima, Zadužbina Andrejević, 2008, ISBN 978-86-7244-683-8 |  |  |  |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MASTER A | rogram |  | n <br> and Control En |  |
| 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 |  |  |  |
| Current projects : |  |  | Domestic : | 2 | International : | 0 |

Science, arts and professional qualifications



Science, arts and professional qualifications


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |  |  |  |
| 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 |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 23 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  | 13 |  |  |  |
| Current projects : |  |  | Domestic : | 1 | International : | 1 |

## Study Programme Accreditation

## MASTER ACADEMIC STUDIES

Measurement and Control Engineering
Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Tomić J. Josif |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 01.09.1995 |  |
| Scientific or art field: |  |  |  |  | Electrical Measurements |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2008 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| PhD thesis |  |  | 2007 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| Magister thesis |  |  | 2004 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| Bachelor's thesis |  |  | 1990 | Faculty of Technical Sciences - Novi Sad |  | Electrical Measurements |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | E130A | Electrical Measurements |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 2. | EK301 | Measurement Systems in Telecommunications |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 3. | EOS10 | Laboratory of electrical measurement |  |  |  | ( E01) Power Engineering - Renewble Sources of Electrical Energy, Undergraduate Professional Studies |
| 4. | EIEEM | Electrical and electronic measurements |  |  |  | ( BM0) Biomedical Engineering, Undergraduate Academic Studies |
| 5. | EIEEMI | Electrical and electronic measurements in industry |  |  |  | ( MR0) Measurement and Control Engineering, Undergraduate Academic Studies |
| 6. | EIEKI | Electronic Components in Instrumentation |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 7. | EIPR1 | Laboratory practicum |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 8. | EIVI | Virtual measurement systems |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 9. | EM456 | Computers in the supervisory and control systems |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |
| 10. | ETI28 | Industrial Electronics |  |  |  | ( E02) Electronics and Telecommunications, Undergraduate Professional Studies |
| 11. | ETI38 | Optoelectronics for communication and sensors |  |  |  | ( E02) Electronics and Telecommunications, Undergraduate Professional Studies |
| 12. | MROUL R | Introduction to laboratory practice |  |  |  | ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies |
| 13. | DE503S | Industrial Electronics |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 14. | SI048 | Measurement Systems in the Field of Biomedicine |  |  |  | ( E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies |
| 15. | BMIM5A | Virtual measurement instrumentation in biomedicine |  |  |  | ( BM0) Biomedical Engineering, Master Academic Studies |
| 16. | DE117S | Selected chapters from optoelectronics sensors systems |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 17. | DE315S | Optoelectronics sensors systems-advanced course |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 18. | DE418S | Design of complex optoelectronics systems |  |  |  | ( E11) Power, Electronic and Telecommunication Engineering, Specialised Academic Studies |
| 19. | EIDNU | Supervisory Control and Data Acquisition Systems Design |  |  |  | ( MR0) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 20. | EIMRV1 | Real Time Measurements |  |  |  | ( MR0) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 21. | EIORM | Measurement and Data Processing |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Study master academic studies | gramme |  | nd Control Engineering |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  | Study programme name, study type |  |  |
| 22. | EM520 | Industrial networks and protocols |  | (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |  |
| 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 <br> ( M40) Technical Mechanics, Doctoral Academic Studies |  |  |
| 25. | DE117 | Selected chapters from optoelectronics sensors systems |  | (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies |  |  |
| 26. | DE315 | Optoelectronics sensors systems-advanced course |  | (E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies |  |  |
| 27. | DE418 | Design of complex optoelectronics systems |  | ( E10) Power, Electronic and Telecommunication Engineering, Doctoral Academic Studies |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 1. | Poljak P., Kušljević M., Tomić J.: Power Components Estimation According to IEEE Standard 1459-2010 Under Wide-Range Frequency Deviations, IEEE Transactions on Instrumentation and Measurement, 2012, Vol. 61, No 3, pp. 636-644, ISSN 00189456 |  |  |  |  |  |
| 2. | J. Tomić, M. Kušljević, D. Marčetić, An Adaptive Resonator Based Method for Power Measurements According to the IEEE TrialUse 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 Algorithm and Adaptive FIR Filtering, IEEE Transactions on Instrumentation \& Measurement, Vol. 59, No. 2, pp. 322-329, February 2010. |  |  |  |  |  |
| 4. | Tomić J., Kušljević M., Vujičić V.: A New Power System Digital Harmonic Analyzer , IEEE Transactions on Power Delivery, 2007, Vol. 22, No 2, pp. 772-780 |  |  |  |  |  |
| 5. | M. Kušljevič, J. Tomić, D. Marčetić, Active power measurement algorithm for power system signals under non-sinusoidal conditions and wide-range frequency deviations, IET Generation, Transmission \& Distribution, Vol. 3, No. 1, pp. 57-65, September 2008. |  |  |  |  |  |
| 6. | D. Marčetić, J. Tomić, M. Kušljević, Unbalanced 3-Phase Distribution System Frequency Estimation Using LMS Method and Positive Voltage Sequence, IET Science, Measurement \& Technology, 2013. rad prihvacen za objavljivanje |  |  |  |  |  |
| 7. | Bajić J., Stupar D., Tomić J., Slankamenac M., Joža A., Živanov M.: Implementation of the Optical Beam Profiler System Using LabVIEW Software Package and Low-Cost Web Camera, 35. MIPRO - International convention on information and communication technology, electronics and microelectronics - Savjetovanje o mikroračunalima u telekomunikacijama, Opatija: MIPRO Croatian Society, 21-25 Maj, 2012, pp. 173-178, ISBN 978-953-233-069-4 |  |  |  |  |  |
| 8. | Tomić J., Slankamenac M., Kušljević M., Živanov M.: A Virtual Laboratory for Teaching Frequency Estimation Techniques, 15. International Power Electronics |  |  |  |  |  |
| 9. | Stupar D., Bajić J., Slankamenac M., Živanov M., Jelić M., Joža A., Tomić J.: Influence of fiber diameter on fiber optic displacement sensor, 16. International Symposium on Power Electronics - Ee, Novi Sad, 26-28 Oktobar, 2011, pp. 1-5, ISBN 978-86-7892-355-5 |  |  |  |  |  |
| 10. | Stupar D., Bajić J., Slankamenac M., Tomić J., Živanov M., Jelić M., Manojlović L.: Optoelectronics system for measuring lightwave attenuation in liquids, 3. Research People and Actual Tasks on Multidisciplinary Sciences, Lozenec: Printing house "Angel Kunchev" Univeristy of Rousse 8, Studentska Street, 7016 Rouse, Bulgaria, 8-10 Jun, 2011, pp. 184-188, ISBN 1313-7735 |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 46 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  | 6 |  |  |  |
| Current projects : |  |  | Domestic : | 2 | International | 0 |

Science, arts and professional qualifications



Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Vukmirović M. Srđan |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |  |
|  |  |  |  |  | 20.11.2000 |  |  |
| Scientific or art field: |  |  |  |  | Automatic Control and System Engineering |  |  |
| Academic carieer |  |  | Year | Institution |  |  | Field |
| Academic title election: |  |  | 2012 | Faculty of Technical Sciences - Novi Sad |  |  | Automatic Control and System Engineering |
| PhD thesis |  |  | 2011 | Faculty of Technical Sciences - Novi Sad |  |  | Automatic Control and System Engineering |
| Magister thesis |  |  | 2004 | Faculty of Technical Sciences - Novi Sad |  |  | Automatic Control and System Engineering |
| Bachelor's thesis |  |  | 2000 | Faculty of Technical Sciences - Novi Sad |  |  | Automatic Control and System Engineering |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
| ID |  | Course name |  |  |  | Study programme name, study type |  |
| 1. | E126 | System Control, Modeling and Simulation |  |  |  | (E10) Power, Electronic and Telecommunication Engineering, Undergraduate Academic Studies |  |
| 2. | E232 | System Modeling and Simulation |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies <br> ( M40) Technical Mechanics and Technical Design, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 3. | GI303A | Distributed Systems in Geomatics |  |  |  | ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies |  |
| 4. | H213 | System Modelling and Simulation 1 |  |  |  | ( GIO) Geodesy and Geomatics, Undergraduate Academic Studies <br> ( H00) Mechatronics, Undergraduate Academic Studies |  |
| 5. | E2312 | Software design for SCADA systems |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( SEL) Software Engineering and Information Technologies Loznica, Undergraduate Academic Studies |  |
| 6. | ESI004 | Cloud Computing in power systems |  |  |  | ( ESO) Power Software Engineering, Undergraduate Academic Studies |  |
| 7. | ESI008 | Development of Cloud application in power systems |  |  |  | ( ESO) Power Software Engineering, Undergraduate Academic Studies |  |
| 8. | SEAU02 | SCADA Software |  |  |  | ( SE0) Software Engineering and Information Technologies, Undergraduate Academic Studies |  |
| 9. | AU502 | Distributed Control Systems |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( MR0) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 10. | H301 | System Modeling and Symulation |  |  |  | ( H00) Mechatronics, Master Academic Studies |  |
| 11. | E2533 | Discrete event simulation |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies |  |
| 12. | E2535 | Software Algorithms in Supervisory Control and Data Acquisition Systems |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |  |
| 13. | ESI027 | Advanced cloud computing in power systems |  |  |  | ( ESO) Power Software Engineering, Master Academic Studies |  |


|  |  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | MASTER ACA | ogram |  | Control |  |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |  |
|  | ID | Course name |  |  | Study programme name, study type |  |  |
| 14. | ESI032 | Smart grid applications in Cloud |  |  | ( ES0) Power Software Engineering, Master Academic Studies |  |  |
| 15. | ESI038 | Service oriented architectures in Smart Grid |  |  | ( ESO) Power Software Engineering, Master Academic Studies |  |  |
| 16. | DAU006 | Selected Chapters in Modeling and Simulation of Dynamic Systems |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |  |
| 17. | DAU018 | Selected Chapters in Distributed Control Systems |  |  | ( E20) Computing and Control Engineering, Doctoral Academic Studies |  |  |
| 18. | ZRD25A | Selected chapters from Artificial Ingeligence |  |  | ( Z01) Safety at Work, Doctoral Academic Studies |  |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |  |
| 1. | Kljajic, Miroslav; Gvozdenac, Dusan; Vukmirovic, Srdjan Use of Neural Networks for modeling and predicting boiler's operating performance ENERGY 201245 (1):304-311 |  |  |  |  |  |  |
| 2. | Vukmirović S., Erdeljan A., Čapko D., Lendak I., Nedić N.: Optimization of workflow scheduling in Utility Management System with hierarchical neural network, International Journal of Computational Intelligence Systems, 2011, Vol. 4, No 4, pp. 672-679, ISSN 1875-6883 |  |  |  |  |  |  |
| 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. | S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, Extension of the Common Information Model with Virtual Meter, Electronics and electrical engineering ISSN: 1392-1215, pp. 59-64 |  |  |  |  |  |  |
| 5. | D. Capko, A. Erdeljan, S.Vukmirovic, I. Lendak, A HYBRID GENETIC ALGORITHM FOR PARTITIONING OF DATA MODEL IN DISTRIBUTION MANAGEMENT SYSTEMS, Information technology and control ISSN: 1392-124X, pp. 316-322 |  |  |  |  |  |  |
| 6. | S.Vukmirovic, A. Erdeljan, D. Capko, I. Lendak, N. Nedic, A Genetic Algorithm Approach for Utility Management System Workflow Scheduling, Information technology and control ISSN: 1392-124X, pp. 310-316 |  |  |  |  |  |  |
| 7. | Ilić S., Vukmirović S., Erdeljan A., Kulić F.: Hybrid Artificial Neural Network System for Short-Term Load Forecasting, Thermal Science, 2012, Vol. 16, No S, pp. 215-224, ISSN 0354-9836 |  |  |  |  |  |  |
| 8. | Vukmirović S., Erdeljan A., Lendak I., Čapko D.: A novel software architecture for Smart Metering systems, Journal of Scientific and Industrial Research (JSIR), 2010, Vol. 2010, No 12, pp. 937-941, ISSN 0022-4456 |  |  |  |  |  |  |
| 9. | Vukmirović S., Vujić G., Vujic B., Jovičić N., Jovičić G., Babić M.: Experimental and Artificial Neural Network approach for forecasting of traffic air pollution in urban areas: the case study of Subotica, Thermal Science - International Scientific Journal, 2010, Vol. 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 |  |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |  |
| Quotation total : |  |  |  | 0 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  |  | 12 |  |  |  |
| Current projects : |  |  |  | Domestic : | 2 | International : | 0 |

Science, arts and professional qualifications

| Name and last name: |  |  |  |  | Živanov S. Žarko |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic title: |  |  |  |  | Assistant Professor |  |
| Name of the institution where the teacher works full time and starting date: |  |  |  |  | Faculty of Technical Sciences - Novi Sad |  |
|  |  |  |  |  | 01.01.2001 |  |
| Scientific or art field: |  |  |  |  | Applied Computer Science and Informatics |  |
| Academic carieer |  |  | Year | Institution |  | Field |
| Academic title election: |  |  | 2012 |  |  | Applied Computer Science and Informatics |
| PhD thesis |  |  | 2012 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| Magister thesis |  |  | 2007 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| Bachelor's thesis |  |  | 2000 | Faculty of Technical Sciences - Novi Sad |  | Applied Computer Science and Informatics |
| List of courses being held by the teacher in the accredited study programmes |  |  |  |  |  |  |
|  | ID | Course name |  |  |  | Study programme name, study type |
| 1. | E217 | Computer Architecture |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies |
| 2. | E223A | Object Programming |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies |
| 3. | E225 | Operating Systems |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies |
| 4. | E234 | Compilers |  |  |  | ( E20) Computing and Control Engineering, Undergraduate Academic Studies <br> ( ESO) Power Software Engineering, Undergraduate Academic Studies <br> ( MRO) Measurement and Control Engineering, Undergraduate Academic Studies |
| 5. | SZP01 | Selected topics in Information technologies |  |  |  | (E00) Power, Electronic and Telecommunication Engineering, Specialised Professional Studies |
| 6. | E2529 | Parallel and distributed architectures |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( ESO) Power Software Engineering, Master Academic Studies <br> ( MR0) Measurement and Control Engineering, Master Academic Studies <br> (E10) Power, Electronic and Telecommunication Engineering, Master Academic Studies |
| 7. | E2534 | Data Compression |  |  |  | ( E20) Computing and Control Engineering, Master Academic Studies <br> ( SEO) Software Engineering and Information Technologies, Master Academic Studies |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 1. | Žarko Živanov, Ivan Nejgebauer, Lazar Stričević, Miroslav Hajduković: Praktikum računarskih vežbi za predmet ARhitektura računara |  |  |  |  |  |
| 2. | Rakić P., Milašinović D., Živanov Ž., Suvajdžin Z., Nikolić M., Hajduković M.: MPI-CUDA parallelization of a finite-strip program for geometric nonlinear analysis: A hybrid approach, Advances in Engineering Software, 2011, Vol. 42, No 5, pp. 273-285, ISSN 0965-9978 |  |  |  |  |  |
| 3. | Hajduković M., Milašinović D., Nikolić M., Rakić P., Živanov Ž., Stričević L.: Scope of MPI/OpenMP/CUDA Parallelization of Harmonic Coupled Finite Strip Method Applied on Large Displacement Stability Analysis of Prismatic Shell Structures, Computer Science and Information Systems (ComSIS), 2012, Vol. 9, No 2, pp. 741-761, ISSN 1820-0214 |  |  |  |  |  |
| 4. | Živanov Ž., Rakić P., Hajduković M.: COLIBROS: Educational operating system, Computer Science and Information Systems (ComSIS), 2010, Vol. 7, No 4, pp. 705-719, ISSN 1820-0214, UDK: 004.45 |  |  |  |  |  |
| 5. | Živanov Ž., Rakić P., Hajduković M.: Wireless sensor network application programming and simulation system, Computer Science and Information Systems (ComSIS), 2008, Vol. 5, No 1, pp. 109-126, ISSN 1820-0214 |  |  |  |  |  |


|  |  | UNIVERSITY OF NOVI SAD <br> ENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MASTER A | ograrr |  | and Control |  |
| Representative refferences (minimum 5, not more than 10) |  |  |  |  |  |  |
| 6. <br> Živanov Ž., Rakić P., Hajduković M.: Using code generation approach in developing kiosk applications, Computer Science and Information Systems (ComSIS), 2008, Vol. 5, No 1, pp. 41-59, ISSN 1820-0214 |  |  |  |  |  |  |
| 7. | *****Autori: Suvajdžin Z., Hajduković M., Živanov Ž. Naziv: Character oriented program editing - habit or necessity? Naziv časopisa: Novi Sad Journal of mathematics |  |  |  |  |  |
| 8. | *****Autori: Hajduković M., Suvajdžin Z., Živanov Ž., Hodžić E. Naziv: A problem of program execution time measurement Naziv časopisa: Novi Sad Journal of mathematics |  |  |  |  |  |
| 9. | *****Milašinović D., Živanov Ž., Rakić P., Suvajdžin Z., Nikolić M., Hajduković M., Borković A., Milaković I.: A Finite-Strip Analysis of Nonlinear Shear-Lag Effect Supported by Automatic Visualization. |  |  |  |  |  |
| 10. | Rakić P., Milašinović D., Živanov Ž., Hajduković M.: MPI-CUDA Parallelisation of the Finite Strip Method for Geometrically Nonlinear Analysis, 1. Internationale Conference on Parallel, Distributed and Grid Computing for Engineering, Pecs: Civil-Comp Press, , ISBN 978-1-905088-29-4 |  |  |  |  |  |
| Summary data for teacher's scientific or art and professional activity: |  |  |  |  |  |  |
| Quotation total : |  |  | 0 |  |  |  |
| Total of SCI(SSCI) list papers : |  |  | 7 |  |  |  |
| Current projects : |  |  | Domestic : | 0 | International : | 0 |

Science, arts and professional qualifications


UNIVERSITY OF NOVI SAD
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.
Teaching is done in lecture halls, classrooms and specialised laboratories. The library houses enough
library units relevant for the Measurement and Control Engineering study programme. All the courses of
the study programme are covered with adequate course literature, course books, and additional material
which is available in time and in insufficient quantities for the regular teaching process. Sufficient IT
support is also provided.
The Faculty of Technical Sciences has its own library and a reading room with enough space for en enery
student in the lecture halls, classrooms and laboratories.

|  | UNIVERSITY OF NOVI SAD <br> FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Standard 11. Quality Control
The quality control of the study programme is performed regularly and systematically through selfevaluation and external quality control.
Checking the quality of the study program is implemented through the following activities: (a) a survey of students at the end of the class in particular subject, (b) surveys of graduates on the quality of the study programme and logistical support to studies, (c) a survey of students at the end of summer semester when evaluating the logistical support to studies, (d) a survey of students at the entry at every year of study. Then students evaluate the programme for the last year of study, (e) survey of teaching and non-teaching staff on the quality of the study program and logistical support to studies.

|  | FACULTY OF TECHNICAL SCIENCES 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 6 |  |
| :---: | :---: | :---: |
|  | Study Programme Accreditation <br> MASTER ACADEMIC STUDIES <br> Measurement and Control Engineering |  |

Standard 12. Distance Education
Distance learning is not available within this study programme.

