

COMPUTER SCIENCE BACHELOR PROGRAM

CURRICULUM 2017–2018 ACADEMIC YEAR



innopolis university

BACHELOR PROGRAM *

The first 2 years of studies students take core courses in Math, Software Engineering and Computer Science.

1 Y E A R	Introduction to Programming I	Computer Architecture	Discrete Math / Logic	Calculus	English for Academic Purposes I	Sport	
	Introduction to Programming II	Data Structures and Algorithms	Linear Algebra	Probability and Statistics	English for Academic Purposes II	Sport	Entrepreneurship & Communication elective
2 Y E A R	Data Modeling and Databases	Operating Systems	Information Theory	Introduction to Artificial Intelligence	Programming Paradigms	Sport	Entrepreneurship & Communication elective
	Software Project	Networks	Theoretical Computer Science	Physics	History	Sport	

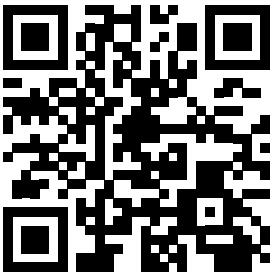
The 3rd year courses according to chosen track:

Artificial Intelligence and Robotics	System Theory	Digital Signal Processing	Algorithms for Artificial Intelligence	Intelligent Systems	Philosophy	Sport	
	Control Theory	Computer Vision	Advanced Systems Dynamics and Control	Artificial Intelligence and Robotics Project	Technical elective	Sport	Entrepreneurship & Communication elective
Data Science	System Theory	Machine Learning	Cloud Programming	Information Retrieval	Philosophy	Sport	
	Data Mining	High Performance Computing	Advanced Databases	Data Science Project	Technical elective	Sport	Entrepreneurship & Communication elective
Software Engineering	System Theory	Software Systems Analysis and Design	Compilers Construction	Software Architecture	Philosophy	Sport	
	Control Theory	Lean Software Development	Software Verification and Testing	Software Engineering Project	Technical elective	Sport	Entrepreneurship & Communication elective

The 4th year courses:

4 Y E A R	Technical Elective I	Technical Elective II	Technical Elective III	Thesis	Academic Research & Writing Culture I	Sport	Entrepreneurship & Communication elective
	Technical Elective IV	Technical Elective V	Technical Elective VI	Thesis	Academic Research & Writing Culture II	Sport	Life Safety

* The curriculum is subject to annual updating and modifying at the request of industrial partners



More information
about courses
<https://goo.gl/3F5fkJ>