

**FACULTY OF
ELECTRICAL AND
ELECTRONICS
ENGINEERING**

- COURSES of the DEPARTMENT OF AUTOMATION
- COURSES of the DEPARTMENT OF ELECTRONICS ENGINEERING
- COURSES of the DEPARTMENT OF ELECTRIC POWER SYSTEMS
- COURSES of the PROJECTS and PRACTICE

DEPARTMENT OF AUTOMATION

Course code	Course title	ECTS Credits	Semester
Bachelor's level courses			
T125B468	Analysis and Reliability of Technical Systems	3	autumn
T125B117	Computational Intelligence Methods	6	autumn
T121B007	Speech Processing Fundamentals	6	autumn
T125B168	Mobile Robots	6	autumn
T125B361	Automatic Control Theory	6	autumn
T125B116	Image Processing and Recognition	6	autumn
T125B167	Intelligent Automation Systems and Devices	6	autumn
T190B302	Electric Drives	6	autumn
T125B155	Fundamentals of Intelligent Control Systems	6	autumn
T125B019	Software for Engineering Calculations	6	autumn
T125B147	Kinematics, Statics and Dynamics of Robots	6	autumn
T125B169	Project of Robotic System	6	autumn
Master's level courses			
T125B150	Control Systems and Programing of Robots	6	spring
T125B151	Modeling of Robotized Systems	6	spring
T125B360	Programmable Logical Controllers	6	spring
T125M003	Systems Modelling and Identification	6	autumn
T125M165	Digital Control Systems	6	autumn
T125M161	Information Technologies for Control Systems	6	autumn
T125M119	Programmable Process Control Systems	6	autumn
T125M105	Process Optimization and Optimal Control	6	autumn
T12M123	Programmable Logical Controllers	6	autumn
T125M021	Modelling and Control of Biotechnological Processes	3	autumn
T270M873	Modern Environmental and Technology Management	3	autumn
T125M008	Industrial Communication Networks	6	spring
T125M262	Computer-Aided Control of Technological Equipment	6	spring
T125M137	Hybrid Systems for Process Monitoring and Control	9	spring

DEPARTMENT OF ELECTRONICS ENGINEERING

Course code	Course title	ECTS Credits	Semester
Bachelor's level courses			
T110B401	Basics of Measurements and Metrology	6	autumn
T121B201	Signals and Systems 1	6	autumn
T170B121	Programming of Electronic Systems	6	autumn

T170B202	Electronics	6	autumn
T170B158	Electronics Manufacturing Technologies	6	autumn
T170B176	Circuit Theory	6	spring
T170B151	Fundamentals of Digital and Microprocessor Systems	6	spring
T190B261	Materials Science and Engineering	6	spring
T170B303	Analogue Devices	6	spring
T170B146	Sensors in Transport	6	spring
Master's level courses			
B110M001	Medical Informatics Systems	6	autumn
B140M009	Ultrasonic Medical Diagnostics	6	autumn
T121M501	Digital Signal Processing and Machine Learning	6	autumn
B115M001	Experimental Biomechanics	6	autumn
B470M101	Systems of Human Physiology	6	autumn
T170M513	Reliability and Certification of Electronic Devices	6	autumn
B140M107	Design of Biomedical Devices	6	autumn
T110M007	Inovative Measuring Systems	6	autumn
T170M014	Testing of Electronic Systems	6	autumn
T170M613	Multiphysics Modelling for Electronics Design	6	autumn
B140M008	Methodology of Biomedical Engineering	6	autumn
B140M102	Imaging Instruments and Methods in Medicine	6	autumn
T111M100	Biomedical Image Processing and Analysis	6	spring
T110M107	Embedded Systems Design	6	spring
T121M161	Digital Wireless Technologies	6	spring
B110M002	Digital Processing of Biomedical Signals	6	spring
B140M106	Biomedical Technology Management	6	spring
T180M111	Smart Mobile Communication Networks and Applications	6	spring
T180M112	Electronic and Cyber Security and Protection	6	spring

DEPARTMENT OF ELECTRIC POWER SYSTEMS

Course code	Course title	ECTS Credits	Semester
Bachelor's level courses			
T190B392	Electromagnetic Field	3	autumn
T140B139	Solar Energy	3	autumn
T140B128	Electric Power Economics and Market	6	autumn
T140B110	High Voltage Engineering of Renewable Energy Sources	6	autumn
T190B015	Analysis of Electric Circuits 1	6	autumn
T500B010	Work Safety	3	autumn
T140B130	Project of Smart Energy Systems Control	6	autumn
T140B011	Power Transmission	6	autumn
T140B125	Smart Electric Power Systems	6	autumn
T125B106	Smart Microprocessor Based Systems	6	autumn
T190B202	Electromechanics	6	spring
T190B010	Analysis of Electric Circuits 2	6	spring
T170B466	Applied Electronics	6	spring
T190B131	Power Electronics and Energy Converters	6	spring
T140B109	Electrical Power Engineering	6	spring
T170B142	Energy Systems Electronics	6	spring
T190B109	Electrical Machines of Renewable Sources	6	spring
T140B012	Technology of Wind and Hydro Energetics	6	spring
T140B111	Protective Relaying and Automation of Disturbed Generation Systems	6	spring
T140B468	Electrical Networks	6	spring
T190B370	Lighting Engineering	3	spring
Master level courses			

Courses in Foreign Languages 2024-2025

P176M001	Artificial Intelligence in Smart Grids	6	autumn
T140M122	Cybernetic Security of Power Systems	6	autumn
T140M261	Power Systems Operation and Control	6	autumn
T140M161	Energetic Systems Analysis	6	autumn
T140M123	Energy Systems	6	autumn
T500M109	Human-Computer Interaction	6	spring
T140M165	Power System Planning	6	spring
T140M125	Markets of Energy Resources	6	spring