

Faculty of Electrical Engineering and Information Technology

Erasmus+ contact: Mgr. Silvia Pirníková

☎ + 421-41-513 2062; ✉ silvia.pirnikova@feit.uniza.sk

Faculty Website: old.fel.uniza.sk/en/index.php?option=com_k2&view=item&layout=item&id=467&Itemid=527

Bc. Degree

Winter Semester

Code	Course Title	Study programme	ECTS	Department	Language
3B0102	Algorithmisation and programming	Automation	6	DCIS	English
3B0304	Theory of information and signals	Automation	5	DCIS	English
3B1501	Single-chip controllers programming	Automation	6	DCIS	English
3B0101	Electrical Circuits 1	All study programmes	6	DEBE	English
3B0301	Electrical Circuits 3	All study programmes	7	DEBE	English
3B3502	Design and Construction of Medical Devices	Biomedical Engineering	5	DEBE	English
3B3504	Wave Processing in Medicine	Biomedical Engineering	5	DEBE	English
3B0512	Sensors in Technology	Electrical Engineering	6	DMAEE	English
3B0302	Electronics 1	All study programmes	5	DME	English
3B2300					
3B0314	Logical Circuits	Telecommunications	5	DME	English
3B0504	Power electronics	Electrical Engineering	6	DME	English
3B0316	Communication technologies 2	TelecommunicationsMulti media	5	DMICT	English
3B7402	Communication technologies 3	Telecommunications	5	DMICT	English
3B0310	Introduction to signals and systems	TelecommunicationsMulti media	4	DMICT	English
3B0507	Electroacoustic	Multimedia Technologies	5	DMICT	English
3B0510	Design of multimedia WEB pages 1	Multimedia Technologies	5	DMICT	English
3B7501	Analog circuit systems 2	Telecommunications	6	DMICT	English
3B7504	Computer networks 2	Telecommunications	5	DMICT	English
3B7503	Radiocommunication systems	Telecommunications	4	DMICT	English
3B0103					
3B0303	Physics 2	All study programmes	5	DPh	English
3B0309	Computer Modelling of Real Processes	All study programmes	3	DPh	English
3B0509	Introduction to photonics	All study programmes	4	DPh	English
3B0506	Electrical apparatus	Electrical Engineering	6	DPSED	English
3B0508	Electricity generation	Electrical Engineering	6	DPSED	English
3B5500	Electricity transmission	Electrical Engineering	6	DPSED	English
3B5504	Electric traction 1	Electrical Engineering	6	DPSED	English
3B0506	Electric drives 1	Electrical Engineering	6	DPSED	English
3B5502	Selected topics of electrical machines	Electrical Engineering	6	DPSED	English
3B5506	Electrical machines in English 2	Electrical Engineering	3	DPSED	English

Summer Semester

Code	Course Title	Study programme	ECTS	Department	Language
3B0203	Programming in C++	Automation	5	DCIS	English
3B1400	Theory of automatic control	Automation	6	DCIS	English
3B1402	Distributed control systems	Automation	6	DCIS	English
3B1403	Sensor Technology	Automation	6	DCIS	English
3B0401	Technical Background of Computers	Automation	3	DCIS	English
3B1601	Control Systems Programming	Automation	5	DCIS	English
3B1602	Information systems in process control	Automation	2	DCIS	English

3B0201	Electrical Circuits 2	All study programmes	5	DEBE	English
3B3401					
3B3400	Sensors and Measuring Methods in Biomedicine	Biomedical Engineering	5	DEBE	English
3B3402	Programming Languages- MATLAB	Biomedical Engineering	5	DEBE	English
3B0204	Measurement and Measuring Systems	All study programmes	5	DMAEE	English
3B0400	Electronics 2	All study programmes	5	DME	English
3B0406	Microprocessor systems	Autotronics	6	DME	English
3B0407	Mechatronics	AutotronicsElectrical Engineerin	6	DME	English
3B0407	Mechatronics	Electrical Engineering	6	DME	English
3B0611	Electronic Devices Design	Electrical Engineering	4	DME	English
3B0605	Power semiconductor systems	Electrical Engineering	6	DME	English
3B0212	Communication technologies 1	TelecommunicationsMulti media	5	DMICT	English
3B0409					
3B7400	Analog circuit systems 1	Telecommunications	5	DMICT	English
3B0408	JAVA - language and applications development	TelecommunicationsMulti media	5	DMICT	English
3B7404	Computer networks 1	Telecommunications	5	DMICT	English
3B6402	Studio technology	Multimedia Technologies	7	DMICT	English
3B0202	Physics 1	All study programmes	7	DPh	English
3B0414	Optics for photonics	All study programmes	5	DPh	English
3B0608	Introduction to fibre optics	All study programmes	5	DPh	English
3B0207	Enterprise management and economy	Electrical Engineering	2	DPSSED	English
3B0415	Design of electrical wiring	Electrical Engineering	6	DPSSED	English
3B5402	Introduction to electric drives	Electrical Engineering	6	DPSSED	English
3B5404					
3B0607	Quality management	Electrical Engineering	4	DPSSED	English
3B0606	Electric drives 2	Electrical Engineering	6	DPSSED	English
3B0609	Basics of project documentation creating	Electrical Engineering	2	DPSSED	English
3B5607	Applications of Digital Signal Controllers 2	Electrical Engineering	3	DPSSED	English

MSc. Degree					
Winter Semester					
Code	Course Title	Study programme	ECTS	Department	Language
3I0101	Advanced Methods of Automatic Control	Process ControlApplied Telemati	7	DCIS	English
3I0102	Communication Networks	Process ControlApplied Telemati	6	DCIS	English
3I0103	Theory of signal processing in process control	Process ControlApplied Telemati	6	DCIS	English
3I0104	Elements in railway signalling systems	Process ControlApplied Telemati	6	DCIS	English
3I7100					
3I0318	Object oriented system development	Process Control	7	DCIS	English
3I0302	Application of railway signalling systems	Process Control	6	DCIS	English
3I0115	Information Systems Security	Process Control	6	DCIS	English
3I0300	Artificial intelligence 2	Process ControlApplied Telemati	7	DCIS	English
3I2100	Medical Electronics	Biomedical Engineering	7	DEBE	English

3I2101	Modelling and Simulation of Electronic Circuits and	Biomedical Engineering	6	DEBE	English
3I2102	Compatibility of Biological and Technical Systems	Biomedical Engineering	6	DEBE	English
3I2300	Biomedical Image Processing	Biomedical Engineering	6	DEBE	English
3I2301	Signal Processing in Medicine	Biomedical Engineering	7	DEBE	English
3I0114	Electromagnetic Field Modelling	Power Electronic SystemsTeleco	5	DMAEE	English
3I9101					
3I9105	Simulation tools in power electronics	All study programmes	4	DME	English
3I0108	Microprocessors, microcomputers & DSP	Power Electronic Systems	7	DME	English
3I9102	Computers in industrial automation 2	Power Electronic Systems	5	DME	English
3I9103	Vehicle Motion Dynamics	Power Electronic Systems	5	DME	English
3I9105	Simulation Tools in Power Electronics	Power Electronic Systems	5	DME	English
3I9300	Design and Construction of Power Electronic System	Power Electronic Systems	8	DME	English
3I9303	Electric transfer of HEV and EV vehicles power	Power Electronic Systems	5	DME	English
3I9304	Power Electronics Applications	Power Electronic Systems	5	DME	English
3I9305	Logic circuits	Power Electronic Systems	5	DME	English
3I9306	Control systems of EV and HEV vehicles	Power Electronic Systems	5	DME	English
3I6101					
3I0112	Signals and communication systems	Telecommunication and Radioco	6	DMICT	English
3I8104	Electromagnetic Wave Propagation and Antennas	Telecommunication and Radioc	6	DMICT	English
3I6103	Room acoustics	Multimedia Engineering	5	DMICT	English
3I6104	Multimedia WEB pages design	Multimedia Engineering	5	DMICT	English
3I6300	Distribution of Multimedia Signals	Multimedia Engineering	4	DMICT	English
3I8301	Radiocommunication systems and networks 2	Telecommunication and Radioc	6	DMICT	English
3I8306	Microwave systems	Telecommunication and Radioc	8	DMICT	English
3I0308	Digital image processing	Telecommunication and Radioco	6	DMICT	English
3I5100	Physics of materials and structures	All study programmes	6	DPh	English
3I5101	Photonics	All study programmes	6	DPh	English
3I5103					
3I0312	Laser and laser systems	All study programmes	6	DPh	English
3I0309	Applied optics and light technique	All study programmes	6	DPh	English
3I5301	Integrated optics and optoelectronics	All study programmes	5	DPh	English
3I3101	Control of electric drives 1	Electric Drives	6	DPSED	English
3I3100	Analysis of electrical machines	Electric Drives	6	DPSED	English
3I4101	Transients in power systems	Electric Power Systems	7	DPSED	English
3I4102	Power plants	Electric Power Systems	6	DPSED	English
3I4103	Electric Substations	Electric Power Systems	6	DPSED	English
3I4301	Feasibility calculations for power	Electric Power Systems	6	DPSED	English
3I4302	Information systems for power system control and	Electric Power Systems	5	DPSED	English
3I3300					
3I3301	Discrete control of electric drives (DREP)	Electric Drives	7	DPSED	English
Summer Semester					
Code	Course Title	Study programme	ECTS	Department	Language

3I0202	Analysis of control system safety (ABRS)	Process ControlApplied Telemati	7	DCIS	English
3I0203	Artificial intelligence 1	Process ControlApplied Telemati	5	DCIS	English
3I0204	Applications of Higher Programming Languages (AVP	Process ControlApplied Telemati	6	DCIS	English
3I0205	Railway signalling systems	Process ControlApplied Telemati	6	DCIS	English
3I0401	Automatic identification	Process Control	5	DCIS	English
3I0402	Security Systems	Process Control	6	DCIS	English
3I0400	Robotic systems	Process Control	5	DCIS	English
3I2200					
3I2201	Technical Means for Medicine	Biomedical Engineering	7	DEBE	English
3I2202	Acquisition and Analysis of Biopotentials	Biomedical Engineering	6	DEBE	English
3I2203	Artificial Intelligence in Biomedicine	Biomedical Engineering	6	DEBE	English
3I2204	Fundamentals of Ecology	Biomedical Engineering	5	DEBE	English
3I0210	Power semiconductor converters	Power Electronic Systems	7	DME	English
3I0217	Integrated Circuits Design	Power Electronic Systems	5	DME	English
3I0212	Traction batteries and charging infrastructure	Power Electronic Systems	6	DME	English
3I0219	Virtual instrumentation	Power Electronic Systems	6	DME	English
3I9200	Analyse and Synthese od Power Electronic Circuits	Power Electronic Systems	6	DME	English
3I9201	Mechatronic systems	Power Electronic Systems	6	DME	English
3I0407					
3I9403	Economic aspects of electromobility	Power Electronic Systems	6	DME	English
3I6203	WEB applications design	Multimedia Engineering	6	DMICT	English
3I6200	Digital television and New Services	Multimedia Engineering	6	DMICT	English
3I6204	3D applications design	Multimedia Engineering	6	DMICT	English
3I8201	Radiocommunication systems and networks 1	Telecommunication and Radioc	6	DMICT	English
3I8200	Higher programming languages	Telecommunication and Radioc	6	DMICT	English
3I0214	Digital audio processing	Telecommunication and Radioco	6	DMICT	English
3I0215	Discrete signals processing	Telecommunication and Radioco	6	DMICT	English
3I8202	Photonic Communication Systems	Telecommunication and Radioc	6	DMICT	English
3I0409	Trends in Information and Communication Technolo	Telecommunication and Radioco	3	DMICT	English
3I5200					
3I5201	Sources and detectors of radiation	All study programmes	6	DPh	English
3I0218	Optical sensors	All study programmes	5	DPh	English
3I5202	Waveguide optics	All study programmes	6	DPh	English
3I0211	Electrical machines for special purposes (ŠES)	Electric Drives	6	DPSED	English
3I3200	Control of electric drives 2 (REP2)	Electric Drives	6	DPSED	English
3I0213	Power system modelling	Electric Power Systems	4	DPSED	English
3I4200	Power system control	Electric Power Systems	8	DPSED	English
3I4201	Renewable energy sources	Electric Power Systems	6	DPSED	English
3I4202	Protective relaying	Electric Power Systems	7	DPSED	English
3I3203	Electric Traction	Electric Drives	6	DPSED	English
3I0316					