NETWORKS AND SOFTWARE FOR TELECOMMUNICATIONS

DEGREE TYPE UPON GRADUATION

Bachelor's Degree

DURATION

4 years (8 semesters)

TEACHING LANGUAGE

Romanian

ECTS POINTS

240

PROGRAMME DESCRIPTION

The Bachelor's degree program *Networks and Software for Telecommunications* managed by the Department of Electronics, Computers and Electrical Engineering, has as fundamental mission the training of specialists with a solid theoretical and practical training in the vast area of telecommunications, and an appropriate specialization in the field of various technologies and telecommunications systems. With the acquired skills, in accordance with the needs identified on the labour market and the national framework of qualifications, the graduates have all the general and specialized knowledge being able to exercise in very good conditions, compatible with the international standards, the engineer profession in a very modern field.

TUITION

EU citizens: 3900 RON (approx. € 780)

Non-EU citizens: € 2430

ENTRY REQUIREMENTS

Baccalaureate Diploma

REASONS TO CHOOSE THIS PROGRAMME

- Superior training in the field of communications - Elaboration of technical specifications, acquisition, installation and operation of fixed and mobile communications equipment, as well as planning, configuration and integration of telecommunications services and information security elements;
- Design of communications infrastructure, adaptation of telecommunications architectures, technologies and protocols for local, metropolitan, large-area and integrated network support applications.
- Use of software engineering specialized languages and tools with a focus on integrated telecommunications systems.

CAREER OPPORTUNITIES
- Communications design engineer.
- Emission engineer.
- Designer of software applications for communications.
- Engineer in the field of Electronics, Telecommunications and Information Technologies.
- Electronics engineer designer.

PROGRAMME DETAILS

Ist YEAR					
Ist SEMESTER			IInd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Mathematical Analysis	5	E	Advanced Mathematics for Engineers	4	E
Linear Algebra, Analytical and Differential Geometry	4	E	Numerical methods	5	E
Computer Assisted Graphics I	4	V	Computer Programming and programming languages	6	E
Physics	5	E	Basics of Electrotechnics I	4	E
Applied Informatics	4	E	Passive Components and Circuits	4	E
Materials for Electronics	3	E	Chemistry	2	V
English I	2	V	English II	2	V
Physical Education I	3	A/R	Physical Education II	3	A/R
French I *	2	V	Programming in Matlab II *	3	C
Programming in Matlab I *	3	C	French II *	3	V

* course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

IInd YEAR					
Ist SEMESTER			IInd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Basics of electrotechnics II	3	E	Measurements in electronics and telecommunications	3	E
Object Oriented Programming	3	E	Fundamental Electronic Circuits	4	E
Electronic Devices	4	E	Digital Integrated Circuits	4	E
Signals and Systems	4	E	Decision and Estimation on Information Processing	2	E
Information transmission theory	3	E	SPICE models	2	V

CAD techniques for making electronic modules	3	V	Analysis and Synthesis of Circuits	3	E
Computer-assisted graphics II	3	V	English IV	2	V
English III	2	V	Physical Education IV	3	A/R
Physical Education III	3	A/R	Internship	4	C
Programming in Labview	2	C	Database	3	C
Virtual instrumentation for electronic systems	2	C	Operating systems	3	C
French III *	2	C	French IV *	2	C
Science and religion *	2	C			

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IIIrd YEAR					
Ist SEMESTER			IInd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Analog Integrated Circuits	4	E	Digital Signal Processing	3	E
Architecture of Microprocessors	4	E	Microcontrollers I	4	E
Electronic measurement systems	4	E	Microcontrollers II	2	V
Microwaves	4	C	Basics of Data Acquisition	4	E
Programming in JAVA	2	V	Television	4	E
Power Electronics	4	E	Communication Systems	4	E
Analogue and Digital Communications	4	C	Automation in electronics and telecommunications	3	C
Communications architectures and protocols	4	E	Internship	4	C
Networks and Services	4	E	Communication	2	V
			Economy	2	V
			Ethics and academic integrity	2	V
			Communications equipment for automobiles *	3	C

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IVth YEAR					
Ist SEMESTER			IInd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Data communications I	4	E	Optic Communications	4	E
Data communications II	2	V	Switching techniques and systems	4	E
Traffic Engineering	3	E	Power supplies for communications equipment	4	E
Software Engineering for Telecommunications	4	E	Drafting of the BD Thesis	4	V
Microwave Circuits	3	E	Internship for BD Thesis	5	V
Radio Communications Equipment	4	E	Construction of telecommunications equipment	3	V
Design - research activity	4	V	Electronic technology		
Quality and reliability	3	V	Operating systems for mobile platforms	3	V
Reliability			Advanced database systems		
Mobile communications networks	3	C	Remote control and radionavigation systems	3	V
Radiocommunications			Human-machine communication systems		
Leadership techniques *	3	V	Defending and passing the BD Thesis exam *	10	E
Electromagnetic compatibility *	3	E			

* course credit points (ECTS) are not taken into account within the semester credit points (ECTS)

* V = test taken in the last two weeks of the semester (about 10% of the final grade)

* C = test taken in the last two weeks of the semester (about 30% of the final grade)

* E = exam taken during the exam period (at least 50% of the final grade)