

APPLIED ELECTRONICS

DEGREE TYPE UPON GRADUATION

Bachelor's Degree

DURATION

4 years (8 semesters)

TEACHING LANGUAGE

Romanian

ECTS POINTS

240

PROGRAMME DESCRIPTION

The *Applied Electronics* Bachelor's Degree Programme aims to train specialists with a solid theoretical and practical training in the field of electronics and information technology, in line with the needs identified on the labour market and with the European qualifications framework

TUITION

EU citizens: 3900 RON (approx. € 780)

Non-EU citizens: € 2430

ENTRY REQUIREMENTS

Baccalaureate Diploma

REASONS TO CHOOSE THIS PROGRAMME

- Competences and skills developed during this BA programme in line with the European requirements;
- Real chances of employment in any company in the country or abroad where the competences and skills developed during this bachelor's program are required;
- Facilities for study and research at European level.

CAREER OPPORTUNITIES

- industry
- research-design
- education

- Electronics Engineer, Transport and Telecommunications, (215204)
- Electronic Engineer Designer (215213)

PROGRAMME DETAILS

I st YEAR					
I st SEMESTER			II nd 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 *F	2	V	Programming in Matlab II *F	3	C
Programming in Matlab I *F	3	C	French II *F	3	V

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

II nd YEAR					
I st SEMESTER			II nd 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 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	Field Internship	4	C
Programming in Labview *O	2	C	Database *O	3	C
Virtual instrumentation *O	2	C	Operating systems *O	3	C
French III *F	2	C	French IV *	2	C
Science and religion *F	2	C			

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III rd YEAR					
I st SEMESTER			II nd SEMESTER		
Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Analog Integrated Circuits	4	E	Signal Digital processing	3	E
Architecture of Microprocessors	4	E	Microcontrollers I	4	E
Electronic measurement instrumentation	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	Automotive Electronics	3	C
Systems' theory *O	4	E	Internship	4	C
Automatic systems and execution elements *O	4	E	Communication *O	2	V
			General economy *O	2	V
			Ethics and academic integrity *O	2	V

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IV th YEAR					
I st SEMESTER			II nd SEMESTER		

Subjects	ECTS	Type of assessment	Subjects	ECTS	Type of assessment
Optoelectronics	3	E	Programmable Automatics	4	E
Software for applied electronics	4	E	Industrial Electronics	4	E
Medical Electronics	3	C	Industrial robotics	4	E
Electronic power converters I	4	E	Drafting of the BD Thesis	4	V
Electronic power converters II	2	V	Internship for BD Thesis	5	V
Reconfigurable Hardware Architectures	4	E	Electromagnetic compatibility *O1	3	V
Research Design activity	4	V	Constructions and Technology of Electronic Equipment *O1	3	V
Quality and reliability *O1	3	V	Advanced database systems *O2	3	V
Reliability of electronic systems *O1	3	V	Operating systems for mobile platforms *O2	3	V
Intelligent Control Systems *O2	3	C	Electric machines *O3	3	V
Mobile robots *O2	3	C	Sensors and actuators *O3	3	V
Built-in electronic automotive systems for vehicle monitoring and control *F	3	V	Defending and passing the dissertation exam *F	10	E
Leadership techniques *F	3	V			

* 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)