COURSE CATALOGUE 2016-2017

Field: **Electronic Engineering and Telecommunications**
Programme: **Bachelor's Degree Programme in Applied Electronics**
Length of studies: **4 years (8 semesters),**
Total number of ECTS credits: **230 + 30 for the B.Sc. Thesis**
Languages of teaching: **Romanian (English/French tutoring available for Erasmus students)**
Form of education: **Full-time**

Course Code	Course Title	Type of course/ tuition hours	Semester	ECTS
EA1101	Mathematical Analysis	Compulsory, 56	Autumn	5
EA1102	Linear Algebra, Analytical and Differential Geometry	Compulsory, 56	Autumn	5
EA1103	Computer Programming I	Compulsory, 70	Autumn	5
EA1104	Physics	Compulsory, 84	Autumn	5
EA1105	Fundamentals of Electrotechnics I	Compulsory, 56	Autumn	5
EA1106	Documents Processing and Internet Services	Compulsory, 14	Autumn	3
EA1107	Foreign Languages I	Compulsory, 28	Autumn	2
EA1108	Sport I	Compulsory, 28	Autumn	1
EAF01	The Sociology of Enterprise	Optional, 28	Autumn	2
EA1201	Fundamentals of Electrotechnics II	Compulsory, 56	Summer	5
EA1202	Special Mathematics	Compulsory, 56	Summer	4
EA1203	Data Structures and Algorithms	Compulsory, 42	Summer	4
EA1204	Computer-Aided Engineering Graphics	Compulsory, 56	Summer	4
EA1205	Passive Electronic Components and Circuits	Compulsory, 56	Summer	4
EA1206	Elements of Mechanics and Mechanisms	Compulsory, 28	Summer	2
EA1207	Measurements in Electronic Engineering and Telecommunications	Compulsory, 56	Summer	5
EA1208	Foreign Languages II	Compulsory, 28	Summer	2
EA1209	Sport II	Compulsory, 14	Summer	1
EAF02	Interpersonal Communication	Optional, 28	Summer	2
EA2101	Electronic Devices	Compulsory, 56	Autumn	5
EA2102	Computer Programming II	Compulsory, 42	Autumn	3
EA2103	Databases	Compulsory, 42	Autumn	3
EA2104	Information transmission and encoding	Compulsory, 56	Autumn	4
EA2105	CAD Techniques in Electronic Engineering (Spice/Orcad)	Compulsory, 28	Autumn	3
EA2106	Electronic Instruments for Measurements	Compulsory, 42	Autumn	4
EA2107	Chemistry	Compulsory, 56	Autumn	4
EA2108	Foreign Languages III	Compulsory, 28	Autumn	2
EA2109	Sport III	Compulsory, 14	Autumn	1
EA2110	Microeconomics	Elective (1 out of 3): 14	Autumn	2
EA2111	Macroeconomics	Elective (1 out of 3): 14	Autumn	2
EA2112	Law and Business Legislation Elements	Elective (1 out of 3): 14	Autumn	2
EAF03	Computer Networks	Optional, 56	Autumn	2
EA2201	Materials for Electronics	Compulsory, 42	Summer	3
EA2202	Fundamental Electronic Circuits	Compulsory, 70	Summer	4
EA2203	Signals and Measurement Systems – Laboratory	Compulsory, 28	Summer	3
EA2204	Numerical methods	Compulsory, 56	Summer	4
EA2205	Digital Integrated Circuits	Compulsory, 56	Summer	4
EA2206	Signals and Systems	Compulsory, 42	Summer	3
EA2207	Foreign Languages IV	Compulsory, 28	Summer	2
EA2208	Sport IV	Compulsory, 14	Summer	1

EA2209	Practical Activities – 4 weeks – 30 hours/week	Compulsory, 120	Summer	4
EA2210	The Architecture of Microprocessors	Elective (1 out of 2): 42	Summer	3
EA2211	Decision and Estimation when Processing the Information	Elective (1 out of 2): 42	Summer	3
EAF04	Operating Systems	Optional, 56	Summer	3
EA3101	Circuit Analysis and Synthesis	Compulsory, 42	Autumn	4
EA3102	Microwaves	Compulsory, 42	Autumn	4
EA3103	Analogue Integrated Circuits	Compulsory, 56	Autumn	4
EA3104	Microcontroller	Compulsory, 56	Autumn	4
EA3105	Electronic converters modelling	Compulsory, 56	Autumn	3
EA3106	Power Electronics	Compulsory, 42	Autumn	4
EA3107	Project 1 - Signals and Integrated Circuits	Compulsory, 28	Autumn	2
EA3108	Management	Elective (1 out of 2): 14	Autumn	2
EA3109	Marketing	Elective (1 out of 2): 14	Autumn	2
EA3110	Electromagnetic Compatibility	Elective (1 out of 2): 28	Autumn	3
EA3111	The Statistic Control of Industrial Processes	Elective (1 out of 2): 28	Autumn	3
EAF05	Software Engineering	Optional, 42	Autumn	3
EA3201	Fundamentals of Data Acquisition Systems	Compulsory, 70	Summer	5
EA3202	Television	Compulsory, 56	Summer	4
EA3203	Digital Signal Processing	Compulsory, 42	Summer	4
EA3204	Communication Systems	Compulsory, 56	Summer	4
EA3205	Industrial Electronic Engineering and IT	Compulsory, 56	Summer	4
EA3206	Project 2 - Microcontrollers	Compulsory, 28	Summer	2
EA3207	Practical Activities – 4 weeks – 30 hours/week	Compulsory, 120	Summer	4
EA3208	Internet Programming Technologies	Elective (1 out of 2): 56	Summer	3
EA3209	Virtual Instrumentation for Electronic Systems	Elective (1 out of 2): 56	Summer	3
EAF06	Electronic Interconnection Technology	Optional, 56	Summer	2
EA4101	Programmable Electronic Systems	Compulsory, 56	Autumn	4
EA4102	Fundamentals of Robotics	Compulsory, 42	Autumn	4
EA4103	Electronics and Medical Informatics	Compulsory, 56	Autumn	4
EA4104	Automotive Electronic Engineering and IT	Compulsory, 56	Autumn	4
EA4105	3D Graphics	Compulsory, 56	Autumn	4
EA4106	Project 3 -Programmable Electronic Systems	Compulsory, 26	Autumn	2
EA4107	Neural Networks and Fuzzy Systems	Elective (1 out of 2): 42	Autumn	4
EA4108	Artificial Intelligence	Elective (1 out of 2): 42	Autumn	4
EA4109	Advanced Network Techniques - Systems and Services	Elective (1 out of 2): 42	Autumn	4
EA4110	Sensors Systems	Elective (1 out of 2): 42	Autumn	4
EAF07	Organizational Psycho-Sociology	Optional, 28	Autumn	2
EA4201	Opto-Electronic Engineering	Compulsory, 42	Summer	4
EA4202	Automated Adjusting Electronic Systems	Compulsory, 42	Summer	3
EA4203	Reconfigurable Hardware Architecture	Compulsory, 56	Summer	4
EA4204	Quality and Reliability	Compulsory, 42	Summer	3
EA4205	Practical Activities – 2 weeks – 30 hours/week	Compulsory, 60	Summer	2
EA4206	B.Sc. Thesis	Compulsory, 72	Summer	8
EA4207	Computer-Aided Analysis of Power Electric Circuits	Elective (1 out of 2): 56	Summer	3
EA4208	Automated Testing of Equipments and Processes	Elective (1 out of 2): 56	Summer	3
EA4209	Multimedia Techniques and Technologies	Elective (1 out of 2): 42	Summer	3
EA4210	Electronic Commerce	Elective (1 out of 2): 42	Summer	3
EAF08	Medical Imaging	Optional, 28	Summer	2