

COURSE CATALOGUE 2016-2017

Field: **Electronic Engineering and Telecommunications**

Programme: **M.Sc. In Advanced Intelligent Electronic Systems**

Length of studies: **2 years (4 semesters)**

Number of ECTS Credits: **120**

Languages of teaching: **Romanian (English/French available for Erasmus students)**

Form of education: **Full-time**

| Course Code | Course Title | Type of course/ tuition hours | Semester | ECTS |
|-------------|---|----------------------------------|----------|------|
| SEIA101 | Engineering Mathematics for Electronic Systems Modelling | Compulsory, 56 | Autumn | 7 |
| SEIA102 | Programming environments and dedicated software architecture | Compulsory, 56 | Autumn | 6 |
| SEIA103_1 | Programming automated numerical systems with PLC | Compulsory, 56 | Autumn | 5 |
| SEIA103_2 | Software for Man-Computer Communication | Compulsory, 56 | Autumn | 5 |
| SEIA104_1 | Processing signals and patterns recognition. Applications in auto imaging and medical imaging | Compulsory, 56 | Autumn | 6 |
| SEIA104_2 | Artificial Intelligence for Robots | Compulsory, 56 | Autumn | 6 |
| SEIA105_1 | Electronic microdrives | Compulsory, 56 | Autumn | 6 |
| SEIA105_2 | Power electronic modules | Compulsory, 56 | Autumn | 6 |
| SEIA106 | English Language | Optional, 28 | Autumn | 2 |
| SEIA107 | Flexible industrial Communication Systems | Compulsory, 56 | Summer | 6 |
| SEIA108_1 | Automotive information systems | Compulsory, 56 | Summer | 6 |
| SEIA108_2 | Integrated Electronic systems for developing electronic devices | Compulsory, 56 | Summer | 6 |
| SEIA109 | Project - applied electronics research | Compulsory, 56 | Summer | 5 |
| SEIA110_1 | SoC Programming | Compulsory, 56 | Summer | 5 |
| SEIA110_2 | Flexible Systems for Intelligent Sensors | Compulsory, 56 | Summer | 5 |
| SEIA111 | Advanced Systems for Measurement, Processing and Information Transmission | Compulsory, 56 | Summer | 5 |
| SEIA112 | Industrial Practice/Research | Compulsory, 56 | Summer | 3 |
| SEIA201_1 | Sociology of Work in Engineering | Compulsory, 56 | Autumn | 6 |
| SEIA201_2 | Artificial Imaging Systems in Control Structures | Compulsory, 56 | Autumn | 6 |
| SEIA202_1 | Intelligent Systems for Biotherapy | Compulsory, 56 | Autumn | 6 |
| SEIA202_2 | Advances Systems for Control and Diagnosis | Compulsory, 56 | Autumn | 6 |
| SEIA202_3 | Designing Auto Optoelectronic Systems | Compulsory, 56 | Autumn | 6 |
| SEIA203_1 | Advanced Elements of Designing Dedicated Electronic Systems | Compulsory, 56 | Autumn | 6 |
| SEIA203_2 | Analysing Signal Integrity in Electronic Device Designing | Compulsory, 56 | Autumn | 6 |
| SEIA203_3 | Advanced CAD Methods in Industry | Compulsory, 56 | Autumn | 6 |
| SEIA204 | Integrated Research Project | Compulsory, 56 | Autumn | 6 |
| SEIA205 | Technical requirements and Standards for Industrial UNS | Compulsory, 56 | Autumn | 6 |
| SEIA207 | Applied Language - German | Optional, 28 | Autumn | 2 |
| SEIA208 | Research Practice | Compulsory, 56 | Summer | 15 |
| SEIA209 | Drafting the M.Sc. Thesis | Compulsory, 56 | Summer | 15 |