Year of study	Electromagnetic Compatibility and Power Quality in Electrical Systems	
	1st Semester (October 1 – February 20)	**2nd Semester (March 1 – July 15)**
I **60 ECTS**	Complements of mathematics Special problems of electromagnetic compatibility with applications in electrical engineering Nonlinear circuits - analysis methods Advanced methods for monitoring and diagnosis of electrical systems Data acquisition systems for power quality and electromagnetic compatibility	Energy efficiency of electrical transportation equipment Digital signal processing with specific applications Optimization methods to increase power quality in electrical systems Quality and Reliability
II **60 ECTS**	Thermal modeling of electrical systems Power quality and electromagnetic compatibility for unconventional sources of energy and consumer devices Techniques and equipment for diagnosis and monitoring of electromagnetic compatibility Environmental technologies-efficiency quality-electromagnetic compatibility Project Management Advanced methods of modeling, simulation and optimization for electrical systems	Thesis Preparation Scientific research

Year of study	Computer-Aided Energy Systems	
	1st Semester (October 1 – February 20)	**2nd Semester (March 1 – July 15)**
I **60 ECTS**	Financing energetic investments Power system dynamics SCADA Systems Applied energy informatics Numerical methods with applications in energy	Artificial intelligence techniques Pollution sources and environment protection equipment Intelligent electrical networks Modern solutions for energy production Energetic and economical efficiency
II **60 ECTS**	Power system dynamics Decentralized energy production Energetic appliances and diagnosis supervising SCADA Systems Financing energetic investments Applied energy informatics	Practical activities for research and final project preparation

Year of study	Electro-Mechanical Complex Systems	
	1st Semester (October 1 – February 20)	**2nd Semester (March 1 – July 15)**
I **60 ECTS**	Electric power quality Advanced Flexible Structures Intelligent Transport Systems Optimal design of electric machines Intelligent Sensors and Advanced Equipment High performance static converters	Complements of Electromechanical Converters Dynamics Efficient Electromechanical Converters Advanced Systems and Control Algorithms Vector Control of Electric Drive Systems Active Power Filters Intelligent Materials
II **60 ECTS**	Analysis Techniques of Hybrid Dynamic Systems Initiation in Product Devising and Advanced Communication Techniques Analysis of value Project Management Quality management Innovation Management and Industrial Property	Scientific research Elaboration of dissertation thesis

Year of study	Electrical Engineering for Environment Protection and Management	
	1st Semester (October 1 – February 20)	**2nd Semester (March 1 – July 15)**
I **60 ECTS**	Radiations Protection and Dosimetry Power Microsystems Conformity Certification Techniques and Systems for Environmental Factors Monitoring Sustainable transport Non-polluting technologies	Meteorology and Climatology Electromagnetic compatibility Filtering techniques and power factor compensation Environmental Legislation and Politics Electrical Techniques and Equipment for Depollution Environmental Management and Durable Development
II **60 ECTS**	Analysis of value Analysis Techniques of Hybrid Dynamic Systems Innovation Management and Industrial Property Initiation in Product Devising and Advanced Communication Techniques Project Management Quality management	Scientific research Elaboration of dissertation thesis

Year of study	Complex System for Aerospace Engineering	
	1st Semester (October 1 – February 20)	**2nd Semester (March 1 – July 15)**
I **60 ECTS**	Scientific research 3D-Computer aided graphics Integrated aerospace navigation systems On-board complex systems for electrical energy conversion Automatic flight control of aircraft landing National and world-wide aeronautical rules and settlements	Scientific research Special problems of flight dynamics Aerospace propulsion systems automatic control Gyroscopic systems analysis and synthesis in control, navigation and aerospace guidance Integrated avionics Special issues of airframes design and manufacturing
II **60 ECTS**	Scientific research Aircraft state estimation systems Aerospace vehicles board electromagnetic compatibility Adaptive systems with neural networks for flight command Energy systems hybrid aircraft and missiles Optimal systems for flight command	Scientific research Elaboration of dissertation thesis