

English taught Exchange Programs

Courses & ECTS Credits Software Engineering & Digital Transformation

Course	Module	ECTS
Semester 1 / Autumn semester: 30 Credits / 354 hours		
Computer Science 1	Introduction to Object Oriented Programming with Java	8
	Fundamentals of Data Communication and Networking	
	Fundamentals of Web Centric Development	
Digital Electronics	Binary Logic & Digital Functions	9
	LabView	
	C Programming	
Communication & Language	Cross Cultural Awareness and Working in a Team	6
	French as a Foreign Language / English as a Foreign Language	
	Fundamentals of Web Centric Development	
Specialized Courses for SEDT	Java Project	7
	Database Management Systems	

Course	Module	ECTS
Semester 2 / Spring semester: 30 Credits / 340 hours		
Computer Science 2	Enterprise Network	13
	Object Oriented Programming with Java EE	
	Development of Mobile Application	
	Intro to .NET Framework (C#)	
Business Intelligence	Analysis & Design with UML	12
	Big Data: Challenges & Opportunities	
	PL/SQL Programming for Databases	
	Artificial Intelligence: Principles & Techniques	
Communication & Language 2	Data Driven Applications with R	5
	Oral Communications & Presentation Skills	
	French as a Foreign Language / English as a Foreign Language	

Course	Module	ECTS
Semester 3: 30 Credits / 336 hours		
Information Systems	Cloud Computing	10
	Information Systems & Organizations	
	Information System Security	
	Web-centric Development & ASP.NET	
Business Management	Management Control & Business	7
	Marketing in a Technical Environment	
	Intellectual Property & Internet Protection Laws	
Project Development & Management	Project management	9
	R & D Project	
Foreign Language	French as a Foreign Language / English as a Foreign Language	4

Students who choose to do the third semester will not have the option of returning to ESIGELEC to pursue a Master's Program.



Courses & ECTS Credits Electronic Embedded Systems

Course	Module	ECTS	Course	Module	ECTS
Semester 1 / Autumn semester: 30 Credits / 354 hours			Semester 2 / Spring semester: 30 Credits / 340 hours		
Computer Science 1	Introduction to Object Oriented Programming with Java	8	Digital Systems	Microprocessors	8
	Fundamentals of Data Communication and Networking			VHDL & Logic Synthesis	
	Fundamentals of Web Centric Development			Communication Busses	
Digital Electronics	Binary Logic & Digital Functions	9	Embedded Operating Systems	Real Time Operating Systems	6
	LabView			Embedded Linux	
	C Programming				
Communication & Language	Cross Cultural Awareness and Working in a Team	6	Embedded Software	Embedded C programming	6
	French as a Foreign Language / English as a Foreign Language			Analysis & Design with UML	
				Embedded Java	
Specialized Courses for EES	Bibliographical Study	7	Instrumentation	Smart Sensors	6
	Digital Electronics Project			Specific Instrumentation	
	Fundamentals of Electronics		Communication & Language 2	French as a Foreign Language / English as a Foreign Language	4

Students who choose to do the third semester will not have the option of returning to ESIGLEEC to pursue a Master's Program.



Course	Module	ECTS
Semester 3: 30 Credits / 330 hours		
Embedded Communication	MtoM Communication	10
	Python Programming & Image Treatments	
	Android Programming	
Embedded Electronics	System on Chip	6
	DSP Processors	
	Safety Systems	
Communication & Language 3	Oral Communication & Presentation Skills	5
	French as a Foreign Language / English as a Foreign Language R&D Project	
Project Development & Management	Project Management	9
	R&D Project	

