SEMESTER 1

Teaching Unit	Modules	Nature	Number of Credits		Allocated Coefficients		Evaluation method	
			ECTS	TECTS	AC	TAC	Continuous Assessment	Blended Assessment
T.U.1: Fundamental sciences for engineers I	Advanced math I	Fundamental	2	8	2	8		x
	Numerical analysis	Fundamental	3		3			x
	Algorithms and programming	Fundamental	3		3			x
T.U.2:	Electrical Grid I	Fundamental	3	10	3	10		x
	DC Machine	Fundamental	3		3			x
	Industrial electricity	Fundamental	3		3			x
	Tutored Project I	Fundamental	1		1		x	
T.U.3: Measurements and Systems I	Continuous Linear System	Fundamental	3	9	3	9		x
	Measurement and Instrumentation	Fundamental	2		2			x
	Analog Electronics	Fundamental	3		3			x
	Tutored Project II	Fundamental	1		1		x	
U.E.4 : Human Sciences and Corporate culture I	Introduction to economics and business management	Transversal	1	3	1	3	x	
	Communication Skills	Transversal	1		1		x	
	English1	Transversal	1		1		x	
Total			30	30	30	30		

SEMESTER 2

Semester	Teaching Unit	Modules	Nature		Number of Credits		Allocated Coefficients		Evaluation method	
					ECTS	TECTS	AC	TAC	Continuous Assessment	Blended Assessment
S2	T.U.5 : Fundamental sciences for engineers II	advanced math II	Fundamental		2	8	2	8		x
		Probability and Statistics	Fundamental		2		2			
		Process Analysis	Fundamental		2		2			x
		Objected oriented programming 1	Fundamental		2		2			x
	TU.6 Electrotechnics II	Electrical Grid II	Fundamental		3	7	3	7		x
		DC Output Converter	Fundamental		3		3			x
		Tutored Project III	Fundamental		1		1		x	
	T.U.7 : Measurements and Systems s II	Sequential control of systems based on API	Fundamental		3	13	3	13		x
		Sampled linear systems	Fundamental		3		3			x
		Digital electronics	Fundamental		3		3			x
		Introduction to embedded systems	Fundamental		3		3			x
		Tutored Project IV	Fundamental		1		1		x	
	TU.8 Human Sciences and Corporate culture I II	English2	Transversal		1	2	1	2	x	
		Entrepreneurial Culture	Transversal		1		1		x	
Total					30	30	30	30		

SEMESTER 3

Semes-ter	Teaching Unit	Modules	Nature		Number of Cred-its		Allocated Coefficients		Evaluation method	
					ECTS	TECTS	AC	TAC	Continuous Assessment	Blended Assessment
S3	T.U.9: Fundamental sciences for engineers III	Advanced Programming	Fundamental		2	5	2	5		x
		Operational research and Optimization	Fundamental		3		3			x
	T.U.10 : Electronics and microelectronics I	Microprocessor based Systems	Fundamental		3	6	3	6		x
		data Acquisition and transmission	Fundamental		2		2			x
		Tutored Project V	Fundamental		1		1		x	
	T.U .11: Signals and Systems I	Optimal filtering	Fundamental		2	8	2	8		x
		Signal processing	Fundamental		2		2			x
		Process Analysis and Identification	Fundamental		3		3			
		Tutored Projet VI	Fundamental		1		1		x	
	T.U.12 : Electrotechnics and power electronics	AC Machine	Fundamental		3	8	3	8		x
		Electronics Commutation	Fundamental		3		3			x
		AC Output Converter	Fundamental		2		2			x
	T.U.13: Human sciences and engineering culture III	English3	Transversal		1	3	1	3	x	
		Problem Solving and Decision Making	Transversal		1		1		x	
		Quality Management & Improvement	Transversal		1		1		x	
Total					30	30	30	30		

SEMESTER 4

Semester	Teaching Unit	Modules	Nature	Number of Credits		Allocated Coefficients		Evaluation method	
				ECTS	TECTS	AC	TAC	Continuous Assessment	Blended Assessment
S4	T.U.14: : Fundamental sciences for engineers III	Database	Fundamental	2	4	2	4		x
		Programmable logic system	Fundamental	2		2			x
	T.U.15 : Electronics and microelectronics II	Embedded operating system	Fundamental	2	9	2	9		x
		microcontroller systems	Fundamental	3		3			x
		Local networks and communication for embedded systems	Fundamental	3		3			x
		Tutored Project VII	Fundamental	1		1		x	
	T.U .16: Signals and Systems II	optimal control	Fundamental	3	8	3	8		x
		nonlinear systems	Fundamental	2		2			
		Digital and analog controller synthesis	Fundamental	2		2			
		Tutored Project VIII	Fundamental	1		1		x	
	T.U.17: Intelligent technologies	Artificial intelligence	Fundamental	2	6	2	6		x
		Image processing and machine vision	Fundamental	2		2			x
		Digital simulation techniques	Fundamental	2		2			x
	T.U.18: Human sciences and engineering culture IV	English4	Transversal	1	3	1	3	x	
		Study tours	Transversal	1		1		x	
		Leadership and communication	Transversal	1		1		x	
Total				30	30	30	30		

SEMESTER 5 (+2 Optional Modules)

Semester	Teaching Unit	Modules	Nature	Number of Credits		Allocated Coefficients		Evaluation method	
				ECTS	UECTS	AC	TAC	Continuous Assessment	Blended Assessment
S5	T.U.19 : Controls and Systems	Adaptive Control	Fundamental	3	8	3	8		x
		Embedded Systems Diagnostics and monitoring	Fundamental	2		2			
		Control chain implementation techniques (Robust Control, Predictive….)	Fundamental	2		2			
		Tutored Control IX	Fundamental	1		1		x	
	T.U.20 : Industrial systems	Real time systems	Fundamental	2	8	2	8		x
		Interfacing technology	Fundamental	3		3			x
		Internet of things	Fundamental	2		2			x
		Tutored Project X	Fundamental	1		1		x	
	T.U.21 : Human sciences and engineering culture V	Labor law	Transversal	1	3	1	3	x	
		Preparation for English level B2 Certification (diploma requirement)	Transversal	1		1		x	
		Company Start-ups	Transversal	1		1		x	
	T.U.22 : Electrical systems	Smart Grid	Fundamental	3	7	3	7		x
		Renewable energies	Fundamental	2		2			x
		Machine Control	Fundamental	2		2			x
	T.U. 23 : Optional	Two opening modules		4	4		4		
		Robot Modeling and Control	Optional	2		2			x
		Industry 4.0	Optional	2		2			x
		Industrial computing applied to agriculture				0			
		Electrical vehicle architecture and composition				0			
Total				30	30	30	30		

SEMESTER 6
End-of-studies project

Semester	Teaching Unit	Modules	Nature		Number of Credits		Allocated Coefficients		Evaluation method	
					ECTS	TECTS	AC	TAC	Continuous Assessment	Blended Assess-ment
S6	T.U.24	End-of-Studies Project	Fundamental		30	30	30	30	X	