

Legend for the tables below

0	<=2	<=3	<=5
---	-----	-----	-----

Table C-2: Targeted Skills for the First Year of EE Program.

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL	
S1	T.U 1	Advanced math 1	30	2	<=3								
		Numerical Analysis	45	3	<=3								
		Algorithms and programming	45	3		<=2	<=5						
	T.U 2	Electric NetworksI	45	3	<=3	<=5	<=5	<=2	<=3				
		DC Machines	45	3	<=3	<=5	<=3	<=2	<=3				
		Industrial electricity	45	3	<=3	<=5	<=3	<=2	<=3				
		Tutored Project 1	22,5	1	<=2	<=2	<=3	<=3	<=3		<=2	<=3	
	T.U 3	Continuous Linear System	45	3	<=5	<=5		<=2	<=2				
		Measurement and Instruments	30	2	<=5	<=5		<=2	<=2				
		Analog Electronics	45	3	<=5	<=5		<=2	<=2				
		Tutored Project 2	22,5	1	<=2	<=5	<=2	<=5	<=3		<=3	<=3	
	T.U 4	Introduction to economics and business management	22,5	1						<=2	<=5	<=2	<=2
		Comminication Skills	22,5	1						<=2	<=3	<=5	<=5
English		22,5	1							<=5	<=5	<=3	
S2	T.U 5	Advanced math 2	30	2	<=5	<=3	<=3		<=2			<=2	
		Probability and Statisics	30	2		<=5	<=5						
		ProcessAnalysis	30	2		<=5	<=5						
		Objected oriented programming	30	2	<=5	<=3		<=2	<=2				
	T.U 6	Electric Networks II	45	3	<=5	<=5			<=3	<=3			
		DC Output Converter	45	3	<=5	<=3	<=3		<=5				
		Tutored Project 3	22,5	1	<=3	<=3	<=2	<=2	<=2		<=2		
	T.U 7	Sequentiel control of systems based on API	45	3	<=5	<=5	<=3	<=3	<=3	<=2			
		Sampled linear systems	45	3	<=5	<=5	<=3	<=3	<=3	<=2			
		Digital electronics	45	3	<=5	<=5	<=3	<=3	<=3	<=2			
		Introduction to embedded systems	45	3	<=5	<=5			<=3	<=3	<=3		
		Tutored Project 4	22,5	1	<=3	<=5	<=5	<=3	<=2	<=2	<=3	<=3	
	T.U 8	English	22,5	1						<=2	<=5	<=5	<=2
Entrepreneurial Culture		22,5	1						<=2	<=3	<=3	<=3	

Table C3: Targeted Skills for the Second Year of EE Program.

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL
S3	T.U 9	Advanced Promming	30	2	■	■	■	■				
		Operation and optimization	45	3	■	■		■	■	■		
	T.U 10	Microprocessor based Systems	45	3	■	■	■		■	■		
		Data Acquisition and transmission	30	2	■	■			■	■		
		Tutored Project 5	22,5	1	■	■	■		■			
	T.U 11	Analysis and identification of process	45	3	■	■	■		■	■		
		Signal proessing	30	2	■	■	■	■				
		Optimal filtering	30	2	■	■			■	■		
		Projettutoré 6	22,5	1	■	■	■	■	■	■	■	■
	T.U 12	AC Machine	45	3	■	■	■	■	■	■	■	■
		Switching Electronics	45	3	■	■	■	■	■	■	■	■
		AC Output Converter	30	2	■	■	■	■	■	■	■	■
	T.U 13	English3	22,5	1						■	■	■
		Problem Solving Method	22,5	1	■				■	■	■	■
		Quality manegment	22,5	1	■	■	■		■	■	■	■
S4	T.U 14	Database management system	30	2	■	■	■		■	■		
		programmable logic system	30	2	■	■	■		■			
	T.U 15	Embedded operating system	30	2	■	■	■		■			
		Microcontrollersystems	45	3	■	■	■		■	■		
		Local networks and communication for embedded systems	45	3	■	■	■		■	■		
	T.U 16	Tutored Projet VII	22,5	1	■	■	■	■	■			
		optimal control	45	2	■	■	■	■	■	■		
		Nonlinearsystems	30	2	■	■	■	■	■	■		
		Digital and analog controller synthesis	30	2	■	■	■	■	■	■		
		Tutored Projet VIII	22,5	1	■	■	■	■	■	■		
	T.U 17	Artificial intelligence	30	2	■	■	■	■	■	■		
		Image processing and machine vision	30	2	■	■	■	■	■	■		
		Digital simulation techniques	30	2	■	■	■			■		
	T.U 18	English4	22,5	1					■	■	■	■
		Study tours	22,5	1					■	■	■	■
Leadership and communication		22,5	1	■				■	■	■	■	

Table C4: Targeted Skills for the third Year of EE Program

Semester	TU	Module	Nbr H	ECTS	KU	TA	TD	SR	EP	DM	CT	LL
S5	T.U 19	Adaptive Control	45	3								
		Embedded Systems Diagnostics and monitoring	30	2								
		Control chainimplementation techniques (Robuste Control, Predective....)	30	2								
		Tutored Control IX	22,5	1								
	T.U 20	Real time systems	30	2								
		Interfaçing techniques	45	3								
		Internet of things	30	2								
		Tutored Project	22,5	1								
	T.U 21	Labor law	22,5	1								
		Préparation for englishlevel B2 Certification (diplomarequirement)	22,5	1								
		Company Start-ups	22,5	1								
	T.U 22	Smart Grid	34,5	3								
		Renewableenergies	45	3								
		Machine Control	30	2								
	T.U 23 (Optional)	Robot Modeling and Control	30	3								
		Industry 4.0	30	3								
Industrialcomputingapplied to agriculture appliquée à l'agriculture		30	3									
Electrical vehicle architecture and composition		30	3									
S6	T.U 24	End-of-Studies Project (ESP)	450	30								