

Interdisciplinary studies: Control, Electronic and Information Engineering
Specialization program: Electronics

#	COURSE	HOURS						Sem.1					EC TS	Sem.2					EC TS	Sem.3					ECTS			
		Σ	Lec	T	Lab	P	S	Lec	T	Lab	P	S		Lec	T	Lab	P	S		Lec	T	Lab	P	S				
1	Advanced Optimization Methods	60	30	0	30	0	0	2	2																			
2	Advanced Topics in Numerical Methods	45	15	0	15	15	0	1	1	1																		
3	Programmable logic devices	45	15	0	30	0	0	1	2																			
4	Electromagnetic compatibility	30	15	15	0	0	0	1	1																			
5	Optoelectronics	30	15	0	15	0	0	1	1																			
6	Microelectronics	45	15	0	30	0	0	1	2																			
7	Sensor networks	30	15	0	15	0	0	1	1																			
8	System level modeling and design	30	15	0	15	0	0	1	1																			
9	Power electronics	30	15	0	15	0	0	1	1																			
10	Analog-Mixed Signal IC Design	45	15	0	30	0	0	1	2																			
11	Foreign Language	60	0	60	0	0	0	2									2											
12	Computer System Security	30	15	0	15	0	0										1	1										
13	Theory of information and coding	45	30	15	0	0	0										2	1										
14	Advanced techniques of PLC programming	45	30	0	15	0	0										2	1										
15	Design for testability	30	15	0	15	0	0										1	1										
16	Telemedicine	30	15	0	15	0	0										1	1										
17	Computer networks	30	15	0	15	0	0										1	1										
18	Mobile networks	60	15	0	15	30	0										1	1	2									
19	Verification of digital systems	30	15	0	15	0	0										1	1										
20	Radiocommunication	45	15	30	0	0	0										1	2										
21	Optional course 1	30	15	0	15	0	0										1	1										
22	Optional course 2	30	15	0	15	0	0										1	1										
23	Systems on chip	45	15	0	30	0	0																					
24	Project Managements (HES)	45	15	0	0	30	0																					
25	Master Thesis Seminar	30	0	0	0	0	30																					
26	Master Thesis	0	0	0	0	0	0																					
27	Digital telecommunication	45	15	15	0	15	0																					
28	Social sciences (HES), optional course	15	15	0	0	0	0	1																				
		1035	420	135	360	90	30	12	3	13	1	0		30	13	5	9	2	0		30	3	1	2	3	2		30
		Weekly instruction hours						29						29						11								
		Number of exams						2						1						1								
		Number of non-exam crediting						11						12						5								

Selected optional courses
 Humanities/Economic/Social courses

Fig. 2. CEIE Electronics specialization study program

Lec – Lecture, T – Tutorial Exercises, Lab – laboratory classes, P- Project, S – Seminar