

University "Politehnica" of Timisoara (Universitatea "Politehnica" Timisoara)

Faculty of Automation and Computers (Facultatea de Automatica si Calculatoare)

Domain: Computers and Information Technology (Domeniul: Calculatoare si Tehnologia Informatiei)

Title and Type of Master Programme Studies: Computer Engineering, Development of Graduation Studies (Titlul si Tipul de Master: Ingineria Calculatoarelor, Aprofundarea in domeniul Studiilor de licenta)

Type of education: Day training (Forma de invatamant: Cu frecventa)

Duration: 2 years (Durata studiilor: 2 ani)

CURRICULA - MASTER COMPUTER ENGINEERING

Anul I (2010/2011)												Anul II (2010/2011)													
SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV							
1.	Optional 1 (choose from 9L1)						Optional 1 (choose from 10L1)						Optional 1 (choose from 11L1)						Research practical intership						
	E	9	28	0	28	0	E	9	28	0	28	0	E	9	28	0	28	0		15				63	140
					0	70					0	70					0	70							
2.	Optional 2 (choose from 9L1)						Optional 2 (choose from 10L1)						Optional 2 (choose from 11L1)						Master thesis elaboration						
	E	9	28	0	28	0	E	9	28	0	28	0	E	9	28	0	28	0		15				63	140
					0	70					0	60					0	60							
3.	Optional 3 (choose from 9L1)						Optional 3 (choose from 10L1)						Optional 3 (choose from 11L1)												
	E	9	28	0	28	0	E	9	28	0	28	0	E	9	28	0	28	0							
					0	70					0	70					0	70							
4.	Research topics in computer systems						Introduction to research						Directed thesis research												
	D	3	28	0	0	0	D	3	28	0	0	0	D	3	0	28	0	0							
					0	50					0	60					0	60							
5.																									
6.																									
7.																									
8.	9 optional disciplines must be chosen (see the attached document containing optional disciplines): - at least 3 Breadth Coverage (BC)(DS) disciplines; - at least 2 Depth Coverage (DC)(DA) disciplines; - least 1 Advanced Electives (AE)(DCA) discipline																								
total / semester	hours: ##	VPI				260	hours: 196	VPI				260	hours: 196	VPI				260	hours: 126	VPI				280	
	credits: 30	evaluations:3E, 1D				4	credits: 30	evaluations:3E, 1D				4	credits: 30	evaluations:3E, 1D				4	credits: 30	evaluations:					
total / week	hours: 14						hours: 14						hours: 14						hours: 9						
	of which: 8	0	6	0		(c, s, l, p)	of which: 8	0	6	0		(c, s, l, p)	of which: 6	2	6	0		(c, s, l, p)	of which: 0	0	0	9	(c, s, l, p)		

### Optional courses

	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
1.	Optional 9L1 - Testing of computer systems(*) (BC) E   9   28   0   28   0   DC	Optional 10L1 - Advanced embedded systems(*) (BC) E   9   28   0   28   0   DC	Optional 11L1 - Advanced digital signal processing (*) (BC) E   9   28   0   28   0   DS	
2.	Optional 9L1 - Image processing and recognition(*) (BC) E   9   28   0   28   0   DC	Optional 10L1 - Integrated information systems (*) (BC) E   9   28   0   28   0   DC	Optional 11L1 - Emergent and collective intelligence systems (*) (DC) E   9   28   0   28   0   DA	
3.	Optional 9L1 - Smart sensors and sensor networks(*) (DC) E   9   28   0   28   0   DA	Optional 10L1 - Optic fiber transmissions(*) (DC) E   9   28   0   28   0   DA	Optional 11L1 - Evolvable hardware (*) (DC) E   9   28   0   28   0   DA	
4.	Optional 9L1 - Data transmission, coding and compression (DC) E   9   28   0   28   0   DA	Optional 10L1 - Cellular data networks(*) (DC) E   9   28   0   28   0   DA	Optional 11L1 - Advanced artificial intelligence(*) (AE) E   9   28   0   28   0   DCA	
5.	Optional 9L1 - Emerging systems(*) (AE) E   9   28   0   28   0   DCA	Optional 10L2 - Automatic design and optimization of VLSI circuits(*) (AE) E   9   28   0   28   0   DCA		
6.	Optional 9L1 - High-end interfaces and equipments (*) (AE) E   9   28   0   28   0   DCA	Optional 9L1 - High-end interfaces and equipments (AE)		

#### Legend

##### Table Structure

Course name							
FE	nc	c	s	l	p	CF	VPI

**FE may be:** D, E

c - course

D - distributed evaluation

E - exam

FE - evaluation forms

CF - formativ category to which the course belongs:

DA - Profund study courses

DCA - Advanced knowledge courses

DS - Synthesis courses

##### Ex.

Research topics in computer systems							
D	3	28	0	0	0		50

l - laboratory

nc - number of credits

p - projects

s - seminar

VPI - number of hours necessary for individual study

pentru un semestru de 14 sapt plus 4 sapt de sesiune

(\*) - discipline optionale activate in anul universitar 2010/2011

**RECTOR,**  
**Prof.dr.ing. Nicolae ROBU**