

Politehnica University 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)**

Domeniul fundamental de ierarhizare (DFI): **Stiinte ingineresti**

Ramura de stiinta (RSI): **Ingineria sistemelor, calculatoare si tehnologia informatiei**

Domeniul de ierarhizare (DII): **Ingineria sistemelor, calculatoare si tehnologia informatiei**

Domeniul de studii universitare de masterat (DSU_M): **Calculatoare si tehnologia informatiei**

Cod DFI.Cod RSI.Cod DII.Cod DSU_M
 20.60.10.10

CURRICULA - MASTER COMPUTER ENGINEERING

Anul I (2013/2014)												Anul II (2013/2014)																		
SEMESTER I						SEMESTER II						SEMESTER III						SEMESTER IV												
1.	Optional 1 (choose from 9L1or 11L1)						Optional 1 (choose from 10L1)						Optional 1 (choose from 9L1 or 11L1)						Research activity and intership											
	E	9	28	0	28	0	49	E	9	28	0	28	0	49	E	9	28	0	28	0	49				15				63	70
2.	Optional 2 (choose from 9L1or 11L1)						Optional 2 (choose from 10L1)						Optional 2 (choose from 9L1 or 11L1)						Master Thesis Development and Defense											
	E	9	28	0	28	0	49	E	9	28	0	28	0	49	E	9	28	0	28	0	49				15				63	
3.	Optional 3 (choose from 9L1or 11L1)						Optional 3 (choose from 10L1)						Optional 3 (choose from 9L1 or 11L1)																	
	E	9	28	0	28	0	49	E	9	28	0	28	0	49	E	9	28	0	28	0	49									
4.	Research topics in computer systems						Introduction to research						Directed thesis research																	
	D	3	28	0	0	0	49	D	3	28	0	0	0	49	D	3	0	28	0	0	49									
5.																														
6.																														
7.																														
8.	9 optional disciplines must be chosen (see the attached document containing optional disciplines): - at least 3 Breadth Coverage (BC) disciplines; - at least 3 Advanced Electives (AE); - remaining disciplines from BC, AE or other Master's curricula																													
total / semester	hours: 196	VPI					196	hours: 196	VPI					196	hours: 196	VPI					196	hours: 126	VPI					70		
	credits: 30	evaluations:3E, 1D					4	credits: 30	evaluations:3E, 1D					4	credits: 30	evaluations:3E, 1D					4	credits: 30	evaluations: 1P					1		
total / week	hours: 14						14	hours: 14						14	hours: 14						14	hours: 9						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(*) E 9 28 0 28 0 BC	Optional 10L1 - Advanced embedded systems(*) E 9 28 0 28 0 BC	Optional 11L1 - Advanced digital signal processing (*) E 9 28 0 28 0 BC	Research Activity 15 98
2.	Optional 9L1 - Image processing and recognition(*) E 9 28 0 28 0 BC	Optional 10L1 - Integrated information systems (*) E 9 28 0 28 0 BC	Optional 11L1 - Robotic systems E 9 28 0 28 0 BC	Development and Defense of Master Thesis 15 98
3.	Optional 9L1 - Smart sensors and sensor networks(*) E 9 28 0 28 0 BC	Optional 10L1 - Cellular data networks(*) E 9 28 0 28 0 BC	Optional 11L1 - Emergent and collective intelligence systems (*) E 9 28 0 28 0 AE	
4.	Optional 9L1 - Data transmission, coding and compression E 9 28 0 28 0 AE	Optional 10L1 - Optic fiber transmissions(*) E 9 28 0 28 0 AE	Optional 11L1 - Evolvable hardware (*) E 9 28 0 28 0 AE	
5.	Optional 9L1 - Emerging systems(*) E 9 28 0 28 0 AE	Optional 10L2 - Automatic design and optimization of VLSI circuits(*) E 9 28 0 28 0 AE	Optional 11L1 - Advanced artificial intelligence(*) E 9 28 0 28 0 AE	
6.	Optional 9L1 - High-end interfaces and equipments (*) E 9 28 0 28 0 AE	Optional 10L1 - Virtual measurement systems E 9 28 0 28 0 AE	Directed thesis research Directed thesis 3 0 28 0 0	
	Research topics in computer systems D 3 28 0 0 0	Introduction to research D 3 28 0 0 0		

Legend																																	
Table Structure	Ex.																																
<table border="1"> <tr> <th colspan="8">Course name</th> </tr> <tr> <td>FE</td> <td>nc</td> <td>c</td> <td>s</td> <td>I</td> <td>p</td> <td>CF</td> <td>VPI</td> </tr> </table>	Course name								FE	nc	c	s	I	p	CF	VPI	<table border="1"> <tr> <th colspan="8">Research topics in computer systems</th> </tr> <tr> <td>D</td> <td>3</td> <td>28</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>50</td> </tr> </table>	Research topics in computer systems								D	3	28	0	0	0		50
Course name																																	
FE	nc	c	s	I	p	CF	VPI																										
Research topics in computer systems																																	
D	3	28	0	0	0		50																										
FE may be: D, E c - course D - distributed evaluation E - exam FE - evaluation forms CF - formativ category to which the course belongs: AE - Advances Elective BC - Breadth Coverage	I - 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 2013/2014																																

RECTOR,
Prof.dr.ing. Viorel-Aurel SERBAN