

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

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

Domain: **Systems Engineering (Ingineria Sistemelor)**

Title and Type of Master Programme Studies: **Automotive Embedded Software - development of graduations studies (aprofundare in domeniul studiilor de licenta)**

Type of Education: **day training (cu frecventa)**

Duration: **2 years**

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): **Ingineria sistemelor**

Cod DFI.Cod RSI.Cod DII.Cod DSU\_M  
20.60.10.20

**CURRICULUM - Ist YEAR (2011/2012)**

**CURRICULUM - IInd YEAR (2011/2012)**

Ist SEMESTER (14 weeks)				IInd SEMESTER (14 weeks)				IIIrd SEMESTER (14 weeks)				IVth SEMESTER (14 weeks)																		
1.	Embedded Systems I				Embedded Systems II				1.	Independent optional course 1 (set 1LM2.3)				Research activity (7 weeks)																
	E	8	28	0	28	0	DA	70		E	8	42	0	28	0	DCA	60	D	15	0	0	0	98	140						
2.	Software Project Management				Communications Skills				2.	Independent optional course 2 (set 1LM2.3)				Preparation and defending dissertation thesis (7 weeks)																
	E	8	28	0	14	0	DS	70		E	7	0	28	0	0	DS	60	E	7	21	0	21	0	DCA	60	E	15	0	0	0
3.	Software Engineering I				Basic Application Know How				3.	Independent optional course 3 (set 2LM2.3)																				
	E	8	28	0	14	0	DA	70		E	8	21	0	0	21	DS	70	E	8	28	0	0	28	DCA	70					
4.	Data Communications and Applications to Automotive				Dynamic Systems and Stability in Automotive Control				4.	Independent optional course 4 (set 2LM2.3)																				
	E	6	28	0	28	0	DA	50		E	7	28	0	14	14	DCA	60	E	8	28	0	0	28	DCA	70					
total / semester	hours:	196		VPI	260	hours:	196		VPI	260	total / semeste	hours:	196		VPI	260	hours:	196		VPI	280									
	credits:	30		evaluations: 4E	4	credits:	30		evaluations: 4E	4		credits:	30		evaluations: 4E	4	credits:	30		evaluation: 1E, 1	2									
total / week	hours:	14				hours:	14				total / week	hours:	14				hours:	14												
	of which:	8	0	6	0	(c, s, l, p)	of which:	6,5	2	3	2,5	(c, s, l, p)	of which:	7	0	3	4	(c, s, l, p)	of which:	0	0	0	14	(c, s, l, p)						

**IInd YEAR - Optional courses**

IIIrd SEMESTER													
Set of optional courses 1LM2.3						Set of optional courses 2LM2.3							
1	Fault detection and diagnosis (optional course 1LM2.3.1)					1	Advanced Information Security for Embedded Systems (optional course 2LM2.3.1)						
	E	7	21	0	21		0	DA	E	8	28	0	0
2	Control of electrical drives (optional course 1LM2.3.2)					2	Advanced Topics in Control Engineering and Computer Science:Sensor Networks (optional course 2LM2.3.2)						
	E	7	21	0	21		0	DCA	E	8	28	0	0
3	Actuators in automotive systems (optional course 1LM2.3.3)					3	Software Engineering II (optional course 2LM2.3.3 )						
	E	7	21	0	21		0	DCA	E	8	28	0	0
4	Visual Programming and Modelling (optional course 1LM2.3.4 )					4	Multi-agent systems (optional course 2LM2.3.4 )						
	E	7	21	0	21		0	DA	E	8	28	0	0

**Remark :** From each of the groups **Optional independent course 1** ..... **Optional Independent course 3** a number of courses will be activated as function of the students' options and number, and financial capacity

**Legenda**

**Tabel structure**

Course name							
FE	nc	c	s	I	p	CF	VPI

**FE may be :** D, E

- c - course
- D - distributed evaluation
- E - exam
- FE - evaluation forms
- CF - formative category to which the course belongs:
  - DA - Profund study courses
  - DCA - Advanced knowledge courses
  - DS - Synthesis courses

**Ex.**

Embedded Systems I							
E	8	28	0	14	0	DA	70

- 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 2011/2012

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