

Politechnica University Timisoara (Universitatea Politehnica 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
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**CURRICULUM - Ist YEAR (2013/2014)**

**CURRICULUM - IInd YEAR (2013/2014)**

	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	70	E	7	21	0	21	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	98		140							
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 / semest	hours: 196		VPI		260		hours: 196		VPI		260		total / semes	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,1D		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)	

## IIInd 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	l	p	CF	VPI

#### Ex.

Embedded Systems I							
E	8	28	0	14	0	DA	70

**FE may be :** D, E

c - course

D - distributed evaluation

E - exam

FE - evaluation forms

CF - formativ category to which the course

DA - Profund study courses

DCA - Advanced knowledge courses

DS - Synthesis courses

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 2013/2014

**RECTOR,**  
**Prof.dr.ing. Viorel-Aurel ȘERBAN**