"Politechnica" 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 (2012/2013)

	Ist SEMESTER (14 weeks)								IInd SEMESTER (14 weeks)							
1.	Embedded Systems I								Embedded Systems II							
	E	8	28	0	28	0	DA	70	E	8	42	0	28	0	DCA	70
2.	Software Project Management								Communications Skills							
	E	8	28	0	14	0	DS	70	E	7	0	28	0	0	DS	60
3.	Software Engineering I								Basic Application Know How							
	E	8	28	0	14	0	DA	70	E	8	21	0	0	21	DS	70
4.	Data Communications and Applications to Automotive								Dynamic Systems and Stability in Automotive Control							
	E	6	28	0	28	0	DA	50	E	7	28	0	14	14	DCA	60
total / semest	hours: 196				VPI			**260**	hours: 196				VPI			**260**
	credits: **30**				evaluations: 4E			**4**	credits: **30**				evaluations: 4E			**4**
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)	

CURRICULUM - IInd YEAR (2012/2013)

	IIIrd SEMESTER (14 weeks)								IVth SEMESTER (14 weeks)							
1.	Independent optional course 1 (set 1LM2.3)								Research activity (7 weeks)							
	E	7	21	0	21	0	DCA	60	D	15	0	0	0	98		140
2.	Independent optional course 2 (set 1LM2.3)								Preparation and defending dissertation thesis (7 weeks)							
	E	7	21	0	21	0	DCA	60	E	15	0	0	0	98		140
3.	Independent optional course 3 (set 2LM2.3)															
	E	8	28	0	0	28	DCA	70								
4.	Independent optional course 4 (set 2LM2.3)															
	E	8	28	0	0	28	DCA	70								
total / semes	hours: 196				VPI			**260**	hours: 196				VPI			**280**
	credits: **30**				evaluations: 4E			**4**	credits: **30**				evaluation: 1E,1D			**2**
total / week	hours: **14**								hours: **14**							
	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)	E	7	21	0	21	0	DA		1	Advanced Information Security for Embedded Systems(*) (optional course 2LM2.3.1)	E	8	28	0	0	28	DCA	
2	Control of electrical drives (optional course 1LM2.3.2)	E	7	21	0	21	0	DCA		2	Advanced Topics in Control Engineering and Computer Science:Sensor Networks (optional course 2LM2.3.2)	E	8	28	0	0	28	DCA	
3	Actuators in automotive systems(*) (optional course 1LM2.3.3)	E	7	21	0	21	0	DCA		3	Software Engineering II (optional course 2LM2.3.3)	E	8	28	0	0	28	DCA	
4	Visual Programming and Modelling (optional course 1LM2.3.4)	E	7	21	0	21	0	DA		4	Multi-agent systems(*) (optional course 2LM2.3.4)	E	8	28	0	0	28	DCA	

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 cathegory 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 2012/2013

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