

Facultatea Mechanical Engineering

Domeniul de licență: Mecatronics and robotics

Programul de studii univ. de masterat: **Quality Engineering for Mechatronics and Robotics**

Forma de învățământ: **cu frecvență**

Durata studiilor: **2 ani**

Domeniul fundamental de ierarhizare (DFI): Engineering Science

Ramură de știință (RSI): Mechanical, mechatronics and robotical engineering

Domeniul de ierarhizare (DII): MECATRONICS AND ROBOTICS

Domeniul de studii universitare de masterat (DSU_M): : MECATRONICS AND ROBOTICS

Code DFI.Code RSI.Code DII.Code DSU_M
20.70.30.10

CURRICULUM
Academic year 2014 - 2015
YEAR I

	SEMESTER 1										SEMESTER 2									
1.	Quality management and fundamentals of quality measurement										Computer aided quality analysis									
	Code	8	E	28	0	28	0	DCA	131	Code	8	E	28	0	14	14	DA	131		
2.	3D Modelling (ProEng) *										Reliability of the mechatronical systems									
	Code	7	E	14	0	0	28	DA	131	Code	7	E	28	0	14	0	DA	131		
3.	Independent optional discipline 1										Independent optional discipline 3									
	Code	8	E	28	0	28	0	DA	131	Code	8	E	14	0	14	28	DA	131		
4.	Independent optional discipline 2 **										Independent optional disciplina 4									
	Code	7	E	28	0	0	14	DCA	131	Code	7	E	28	0	14	0	DA	131		
5.																				
6.	Optional discipline 1 Optimizations algorithms in Matlab										Optional discipline 2 Dynamic analysis of mechatronical systems									
	Code	7	E	28	0	28	0	DC-F	130	Code	7	E	28	0	14	0	DC-F	130		
7.																				
8.																				
9.																				
total / semester	hours:	196			VPI:			524			hours:	196			VPI:			524		
	credits:	30			evaluări:			5			credits:	30			evaluări:			5		
total / week	hours:	14	98	0	56	42					hours:	14	98	0	56	42				
	of which:					7	0	4	3	(c, s, l, p)	of which:					7	0	4	3	(c, s, l, p)

Legenda

Nume disciplina									
Cod	nc	FE	c	s	l	p	CF	VPI	

Cod = cod disciplina
nc = nr.credite transferabile
FE = forma de evaluare

FE ∈ {E, D, C, P-E, P-D}

E=examen
D=evaluare distribuita

c=nr.ore curs/semestru
s=nr.ore seminar

l=nr.ore laborator

p=nr.ore proiect

CF=categorie formativa careia ii apartine disciplina

CF ∈ {DA, DCA, DS}

DA - disciplina de aprofundare

DCA - disciplina de cunoastere avansata

DS- disciplina de sinteza

VPI = volum de ore necesar pregatirii individuale pentru un semestru de 14 sapt. plus 4 sapt. de sesiune

Exemplu

Managementul calitatii si bazele calimetriei									
Code	8	E	28	0	14	14	DCA	130	

(*) - discipline optionale activate in anul universitar 2014 / 2015

CURRICULUM
Academic year 2014 - 2015
YEAR II

	SEMESTER 3								SEMESTER 4							
1.	Automation and robotized manufacturing lines *								Research activities 7 weeks x 14 hours							
	Code	8	E	28	0	28	0	DS	131	Code		D			98	DS
2.	Human-Machine interface								Elaboration of the master thesis 7 weeks x 14 hours							
	Code	7	E	28	0	0	14	DS	131	Code	30	E			98	DS
3.	Independent optional discipline 5															
	Code	8	E	28	0	14	14	DS	131							
4.	Independent optional discipline 6															
	Code	7	E	14	0	28	0	DS	131							
5.																
6.	Optional discipline 3 Optimal design and systems reconfiguration															
	Code	7	E	28	0	14	0	DC-F	130							
7.																
8.																
9.																
total / semester	hours:	196		VPI:		524		hours:	196		VPI:		524			
	credits:	30		evaluări:		5		credits:	30		evaluări:		2			
total / week	hours:	14	98	0	70	28		hours:	14							
	of which:	7	0	5	2	(c, s, l, p)		of which:	0	0	0	14	(c, s, l, p)			

INDEPENDENT OPTIONAL DISCIPLINES
YEAR I

	SEMESTER 1								SEMESTER 2								
Ind. Opt. Disc. 1 / 3	Statistical control of the processes								Conceptual design of the mechatronical systems								
	Code	8	E	28	0	28	0	DA		Code	8	E	14	0	14	28	DA
Ind. Opt. Disc. 2 / 4	Structural analysis in mechatronical systems								Shape integration and configuration of the mechatronical systems in CATIA								
	Code	8	E	28	0	28	0	DA		Code	8	E	14	0	14	28	DA
Ind. Opt. Disc. 2 / 4	Analysis and processing of data in MATLAB								Methods and sistems for the quality testing								
	Code	7	E	28	0	0	14	DCA		Code	7	E	28	0	14	0	DA
Ind. Opt. Disc. 2 / 4	Research methods								Data bases and expert systems								
	Code	7	E	28	0	0	14	DCA		Code	7	E	28	0	14	0	DA
Ind. Opt. Disc. 2 / 4	Product development and project management **								Advanced control systems								
	Code	7	E	28	0	0	14	DCA		Code	7	E	28	0	14	0	DA
Ind. Opt. Disc. 2 / 4									Optical engineering								
	Code	7	E	28	0	14	0	DA		Code	7	E	28	0	14	0	DA

YEAR II

	SEMESTER 3								SEMESTER 4							
Ind. Opt. Disc. 5	PLCs. Applications and programming															
	Code	8	E	28	0	14	14	DS								
Ind. Opt. Disc. 6	Linear systems and systems identification															
	Code	8	E	28	0	14	14	DS								
Ind. Opt. Disc. 6	Total quality management															
	Code	7	E	14	0	28	0	DS								
Ind. Opt. Disc. 6	Mecatronics of bussines environment															
	Code	7	E	14	0	28	0	DS								
Ind. Opt. Disc. 6	Computer aided managemnt of robitized manufacturing systems															
	Code	7	E	14	0	28	0	DS								

RECTOR,
Prof.univ.dr.Ing.Viorel-Aurel ȘERBAN