Mechatronics syllabus

MODULE/COURSE/other	Compulsory/ Elective	Year	Number of hours				Total student load	CP
			L	S	LE	Total		
Communications in engineering	Compulsory	1.	120	72	48	90	570	20
English terminology for Mechatronics	Compulsory	1.	48	36	-	84	180	6
Business communication and management	Compulsory	1.	48	36	-	84	180	6
Computing and informatics	Compulsory	1.	24	-	48	72	120	5
Practical training – communications in engineering	Compulsory	1.	-	-	-	90	90	3
Mechatronics basics	Compulsory	1.	120	12	48	114	540	20
Basics of mechanical engineering	Compulsory	1.	42	-	24	66	150	6
Basics of electrical engineering	Compulsory	1.	42	-	24	66	150	6
Sustainable development	Compulsory	1.	36	12	-	48	120	4
Practical training- mechatronics basics	Compulsory	1.	-	-	-	120	120	4
Mechatronics 1	Compulsory	1.	84	-	96	180	546	20
Mechatronics systems 1	Compulsory	1.	42	-	48	90	178	7
Measurements	Compulsory	1.	42	-	48	90	178	7
Practical training -	Compulsory	1.	-	-	-	190	190	6

MODULE/COURSE/other	Compulsory/ Elective	Year	Number of hours				Total student load	CP
			L	S	LE	Total		
Mechatronics 1								
Economics basics	Compulsory	2.	48	12	24	84	240	8
Business economics	Compulsory	2.	48	12	24	84	180	6
Practical training – economics basics	Compulsory	2.	-	-	-	60	60	2

MODULE/COURSE/other	Compulsory /Elective	Year	Number of hours				Total student load	CP
			L	S	LE	Total		
Mechatronics 2	Compulsory	2.	108	24	96	228	604	21
Mechatronics systems 2	Compulsory	2.	36	-	48	84	156	6
Technical regulations and design	Compulsory	2.	36	24	12	72	144	5
Communication technologies and services	Compulsory	2.	36	-	36	72	144	5
Practical training - Mechatronics 2	Compulsory	2.	-	-	-	160	160	5
Automation	Compulsory	2.	72	-	72	144	468	16
Programming in automation	Elective	2.	36	-	36	72	144	5

MODULE/COURSE/other	Compulsory/Elective	Year	L	S	LE	Total	Total student load	CP
Technological processes	Elective	2.	36	-	36	72	144	5
Practical training – Automation	Elective	2.	-	-	-	180	180	6
Robotics	Elective	2.	72	-	72	144	468	16
Robotic systems 1	Elective	2.	36	-	36	72	144	5
Technological processes	Elective	2.	36	-	36	72	144	5
Practical training - Robotics	Elective	2.	-	-	-	180	180	6

MODULE/COURSE/other	Compulsory/Elective	Year	L	S	LE	Total	Total student load	CP
Production systems	Elective	2.	72	-	72	144	468	16
Computer aided technology	Elective	2.	36	-	36	72	144	5
Technological processes	Elective	2.	36	-	36	72	144	5
Practical training – Production systems	Elective	2.	-	-	-	180	180	6
Programming in automation	Elective	2.	36	-	36	72	144	5
Robotic systems 1	Elective	2.	36	-	36	72	144	5
Computer aided technology	Elective	2.	36	-	36	72	144	5

MODULE/COURSE/other	Compulsory /Elective	Year	L	S	LE	Total	Total student load	CP
Development of application programs	Elective	2.	36	-	36	72	144	5
Electronics in mechatronics	Elective	2.	36	-	36	72	144	5
Multimedia	Elective	2.	36	-	36	72	144	5
Drives and mechanisms	Elective	2.	36	-	36	72	144	5

MODULE/COURSE/other	Compulsory /Elective	Year	L	S	LE	Total	Total student load	CP
Logistics mechatronics systems	Elective	2.	36	-	36	72	144	5
Risk management in engineering	Elective	2.	36	-	36	72	144	5
One elective	Elective	2.					150	5
Diploma thesis	Compulsory							5*

Notes:
* - 5 additional credit points are acquired within Practical Training

Abbreviations:
LC — lectures
S — seminars
LE — laboratory exercises
CP — European Credit Transfer System (ECTS) credit points