

CURRICULUM

Bachelor's degree program in Mechanical Engineering and Instrumentation - part time

ECTS Subject code T p ME No													
- T – type of course: B for BEng, M for MEng;													
- I - IV semester – fundamental subjects - professional field 5.1. Machine engineering;													
- p - additional symbol for Plovdiv Branch													
- ME – specialty “Mechanical Engineering and Instrumentation” in Bulgarian;													
- No – number of the subject;													
Lectures (L), Tutorials (Tut.), Labs (Lab.), Auditorium Total (AT), Self-Study (SS), Exam (E), Continuous Assessment (CA), Semester Project (SP), Semester Assignment (course work) (SA).													
\	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER I													
1	MAT12	Mathematics I	15	15	0	30	180	210	1				7
2	PHY01	Physics	25	10	15	50	160	210	1				7
3	CHE01	Chemistry	15	0	10	25	125	150		1			5
4	CCE23	Information and Communication Technologies	15	0	25	40	200	240	1			1	8
5	LNG01	Foreign Language I	0	15	0	15	45	60		1			2
6	PRC11	Practicum	0	0	0	0	30	30		1			1
Total			70	40	50	160	740	900	3	3	0	1	30
SEMESTER II													
7	MAT22	Mathematics II	15	15	0	30	150	180	1				6
8	ENG01	Material Science	25	0	25	50	160	210	1			1	7
9	MEC01	Mechanics I	15	10	10	35	175	210	1			1	7
10	EEA21	Basics of Electrical Engineering and Electronics	15	0	15	30	120	150		1			5
11	LNG02	Foreign Language II	0	15	0	15	45	60		1			2
12	PRC12	Practicum	0	0	0	0	90	90		1			3
Total			70	40	50	160	740	900	3	3	0	2	30
SEMESTER III													
13	MAT31	Mathematics III	15	15	0	30	150	180	1				6
14	MEC02	Mechanics II	15	0	15	30	180	210	1			1	7
15	MEC03	Strength of Materials	25	0	15	40	170	210	1			1	7
16	ENG02	Engineering Graphics	15	0	25	40	140	180		1		1	6
17	CCE24	Internet Technologies	10	10	0	20	70	90		1			3
18	PRC13	Practikum	0	0	0	0	30	30		1			1
Total			80	25	55	160	740	900	3	3	0	3	30
SEMESTER IV													
19	MEC04	Machine Elements	25	10	15	50	160	210	1				7
20	MEC05	Fluid Mechanics, Hydro and Pneumatic Drive	25	0	15	40	140	180	1				6
21	ENR01	Thermodynamics and Heat Transfer	15	0	15	30	120	150	1				5
22	MEC06	Theory of Machines and Mechanisms	15	10	10	35	145	180	1			1	6
23	MEC07	Machine Elements - project	0	0	0	0	90	90			1		3
24	PRC07	Practicum	0	0	0	0	90	90		1			3
Total			80	20	55	155	745	900	4	1	1	1	30

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
25	BpME01	Mechanical engineering technology	15	10	10	35	115	150	1				5
26	BpME02	Production automation and robotics	15	0	10	25	95	120	1				4
27	BpME03	Lifting and transport equipment	15	0	10	25	125	150	1				5
28	BpME04	Metrology and measuring equipment	15	10	10	35	115	150		1		1	5
29	BpME05	Precision mechanical engineering	15	0	15	30	120	150	1				5
30	BpME06	Structural non-metallic composites	10	0	10	20	70	90		1			3
31	BpME07	Mechanical engineering technology - project	0	0	0	0	90	90			1		3
Total			85	20	65	170	730	900	4	2	1	1	30
SEMESTER VI													
32	BpME08	Optional subject (List 1)	15	0	15	30	120	150	1			1	5
33	BpME09	Optional subject (List 2)	15	0	10	25	95	120		1			4
34	BpME10	Design methodology	15	0	15	30	120	150		1			5
35	BpME11	Engineering logistics	15	0	15	30	120	150	1				5
36	BpME12	Regulating and control equipment	15	0	10	25	95	120	1				4
37	BpME13	Optional subject (List 3)	15	0	10	25	95	120	1				4
38	BpME14	Engineering design I (by subject BpME04, BpME05, BpME06, BpME07, BpME08, BpME09 or BpME10)	0	0	0	0	90	90			1		3
Total			90	0	75	165	735	900	4	2	1	1	30
SEMESTER VII													
39	BpME15	Quality control and management	15	0	15	30	150	180	1			1	6
40	BpME16	Economics	15	15	0	30	150	180		1			6
41	BpME17	3D prototypes (design and construction)	25	0	15	40	110	150		1			5
42	BpME18	Optional subject (List 4)	25	0	15	40	110	150	1				5
43	BpME19	Optional subject (List 5)	15	0	15	30	90	120		1			4
44	BpME20	Engineering design II (by subject BpME18)	0	0	0	0	120	120			1		4
Total			95	15	60	170	730	900	2	3	1	1	30
SEMESTER VIII													
45	BpME21	Automated production systems	15	0	10	25	125	150	1				5
46	BpME22	Optional subject (List 6)	20	0	10	30	120	150		1			5
47	BpME23	Optional subject (List 7)	20	0	10	30	120	150		1			5
48	BpME24	Safety and eco-protection technology	20	0	10	30	60	90		1			3
49	BpME25	Practicum	0	0	0	0	60	60		1			2
50	BpME26	Diploma project	0	0	0	0	300	300	Defense of diploma thesis			10	
Total			75	0	40	115	785	900	1	4	0	0	30

LIST OF THE OPTIONAL SUBJECTS

List 1		ECTS = 5
1	Technological processes on Computer Numeric Control machines	BpME08.1
2	External ballistics	BpME08.2
3	Metrology and measuring equipment II	BpME08.3
List 2		ECTS = 4
1	Converters in precision engineering	BpME09.1
2	Internal ballistics	BpME09.2
3	Measurement in ecology, medicine and biotechnology	BpME09.3
List 3		ECTS = 4
1	Optical technology	BpME13.1
2	Design and operation of small arms	BpME13.2
3	Non-destructive testing	BpME13.3
List 4		ECTS = 5
1	Metrology and measuring equipment II	BpME18.1
2	Design of elements for small arms (ammunition)	BpME18.2
3	Control automation	BpME18.3
List 5		ECTS = 4
1	Technological equipment in instrument making	BpME19.1
2	Intelligent Measuring Systems	BpME19.2
List 6		ECTS = 5
1	Computer integrated design in mechanical engineering	BpME22.1
2	Structure and action of ammunition	BpME22.2
3	Computer modelling and simulations	BpME22.3
List 7		ECTS = 5
1	Low-cost automation of discrete processes in precision engineering	BpME23.1
2	Production of elements for small arms (ammunition)	BpME23.2
3	Reliability and diagnostics of devices and machines	BpME23.3

LIST OF THE FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER I													
1	FaSPR01	Sport	0	0	0	<i>0</i>	30	30		1			1
2	FaBpME1	CAD systems	10	0	15	25	95	120		1			4
SEMESTER II													
1	FaSPR02	Sport	0	0	0	<i>0</i>	30	30		1			1
SEMESTER III													
1	FaSPR03	Sport	0	0	0	<i>0</i>	30	30		1			1
SEMESTER IV													
1	FaSPR04	Sport	0	0	0	<i>0</i>	30	30		1			1
SEMESTER V													
1	FaSPR05	Sport	0	0	0	<i>0</i>	30	30		1			1
2	FaBpME2	Specialty english	0	15	0	15	45	60					2
SEMESTER VI													
1	FaSPR06	Sport	0	0	0	<i>0</i>	30	30		1			1
2	FaBpME03	Project management(in english)	10	0	15	25	65	90					3
SEMESTER VII													
1	FaSPR07	Sport	0	0	0	<i>0</i>	30	30		1			1
SEMESTER VIII													
1	FaSPR08	Sport	0	0	0	<i>0</i>	30	30		1			1