

CURRICULUM

Master's degree program in Mechanical Engineering and Instrumentation

ECTS Subject code T p ME No - T – type of course: B for BEng, M for MEng; - 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	MpME01	Application of Computer Technologies in the Design of Mechanical Engineering Products	30	0	30	60	90	150	1			1	5
2	MpME02	Metrology Assurance in Mechanical Engineering	30	0	30	60	90	150	1			1	5
3	MpME03	Computer Analysis and Simulation in Mechanical Engineering	30	0	30	60	60	120	1				4
4	MpME04	Reliability of Industrial Systems	30	0	30	60	60	120	1				4
5	MpME05	Innovative Materials and Technologies in Mechanical Engineering	30	0	15	45	75	120		1		1	4
6	MpME06	Engineering Research	30	0	15	45	45	90		1			3
7	MpME07	Technical Legislation and Law	30	15	0	45	45	90		1			3
8	MpME08	Course Project (subjects № 3, № 4 or № 6)	0	0	0	0	60	60			1		2
Total			210	15	150	375	525	900	4	3	1	3	30
SEMESTER II													
9	MpME09	Optional subject (List - 1)	30	0	15	45	45	90	1				3
10	MpME10	Optional subject (List - 2)	30	0	15	45	45	90	1			1	3
11	MpME11	Optional subject (List - 3)	30	0	15	45	45	90		1	1		3
12	MpME12	Optional subject (List - 4)	30	0	15	45	45	90		1		1	3
13	MpME13	Optional subject (List - 5)	30	0	15	45	45	90	1		1		3
14	MpME14	Diploma project	0	0	0	0	450	450	Defense of diploma thesis				15
Total			150	0	75	225	675	900	3	2	2	2	30

*Забележка:

Subjects MME09.1, MME10.1, MME11.1, MME12.1 and MME13.1 form Master Program “**Intelligent Systems in Mechanical Engineering**”

Subjects MME09.2, MME10.2, MME11.2, MME12.2 and MME13.2 form Master Program “**Digitalization in Mechanical and Device Engineering**”

Subjects MpME09.3, MpME10.3, MpME11.3, MpME12.3 и MpME13.3 form master Program “**Quality Control and Management**”

Subject MpME09.4, MpME10.4, MpME11.3, MpME12.4 и MpME13.4 form master Program “**Arms and ammunition production**”

LIST OF THE OPTIONAL SUBJECTS

List 1		ECTS = 3
1	Intelligent Measurement Systems	MpME09.1
2	Reverse Engineering and Modernization of Automation Equipment	MpME09.2
3	Control and measuring systems	MpME09.3
4	Flight dynamics	MpME09.4
List 2		ECTS = 3
1	Computer Integrated Manufacturing Systems	MpME10.1
2	Stack-up Analysis and Functional Dimensioning	MpME10.2
3	Automated production systems	MpME10.3
4	Applied thermogas dynamics	MpME10.4
List 3		ECTS = 3
1	Materials Handling Robots and Manipulators	MpME11.1
2	Computer Aided Modeling and Analysis of Mechanical Systems	MpME11.2
3	Quality management systems	MpME11.3
4	Design of mechanisms and devices for automatic weapons	MpME11.4
List 4		ECTS = 3
1	Programming in CAD Environment and Automation in Geometric Modeling	MpME12.1
2	Computer Aided Quality and Metrology Control	MpME12.2
3	Computer Aided Quality and Metrology Control	MpME12.3
4	Ammunition	MpME12.4
List 5		ECTS = 3
1	Intelligent Drive Systems	MpME13.1
2	Computer Aided Design of Machine Modules and Aggregates	MpME13.2
3	Automation of control in mechanical engineering	MpME13.3
4	Design of small arms and ammunition	MpME13.4

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	FaMME01	Computer integrated production systems	30	0	30	60	60	120		1			4
SEMESTER II													
1	FaMME02	Optimization of machinebuilding constructions	30	0	30	60	60	120		1			4

- Note: 1. The lists of elective and optional disciplines are updated annually and are adopted by the FS of FMU.
 2. The schedule of elective courses will be announced by the faculty office.