



CURRICULUM

Professional orientation: **Machine Engineering**
 Program: **Computerized Manufacturing Technologies**
 Professional qualification: **Mechanical Engineer**
 Educational and qualificational degree: **Bachelor**
 Form of study: **Full - Time**
 Term of study: **4 years / 8 semesters**

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mathematics, part 1	1				30	15		15	160	115	275	7
2	Engineering Graphics and Technical Drawing		1			30		30		150	90	240	6
3	Information Technologies and Systems	1				15		30		150	105	255	6
4	Material Science	1				30		30		150	90	240	6
5	English				1		45			90	45	135	3
6	Optional Subject				1					30	30	60	1
6a	Specialized Sport Activities, part 1				1						30	30	1
66	Sport and Social Adaptation, part 1				1						30	30	1
7	Practical Training, part 1				1					30	30	60	1
Total for the 1 semestar:		3	1		3	105	60	90	15	760	505	1265	30
8	Mathematics, part 2	2				30	15		15	135	90	225	6
9	Introduction to the Speciality	2				15		30		135	90	225	5
10	Materials Technology	2				30		30		150	90	240	6
11	Applied Geometry and Technical Documentation		2			30		30		135	75	210	5
12	Technical Mechanics	2				30		15	15	135	90	225	6
13	Optional Subject				2					30	30	60	1
13a	Specialized Sport Activities, part 2				2						30	30	1
136	Sport and Social Adaptation, part 2				2						30	30	1
14	Practical Training, part 2				2					30	30	60	1
Total for the 2 semestar:		4	1		2	135	15	105	30	750	495	1245	30
15	Industrial Management		3			30		15		135	90	225	5
16	Strength of Materials	3				30		15		150	105	255	6
17	Applied Computerized Engineering Calculations		3					45	15	135	90	225	5
18	Machine Elements	3				30		15		150	105	255	6
19	Fluid Mechanics	3				30		15		135	90	225	5
20	Basics of Computer Aided Design in Mechanical Engineering		3			15		30		135	90	225	5
21	Optional Subject				3					30	30	60	1
21a	Specialized Sport Activities, part 3				3						30	30	1
216	Sports Management, part 1				3						30	30	1

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total for the 3 semestar:		3	3		1	135		135	15	870	600	1470	33
22	Strength of Materials	4				30		30		150	90	240	6
23	Thermal Engineering	4				15		30		150	105	255	6
24	Theory of Mechanisms and Machines		4			30		15	15	135	90	225	6
25	Electrical Engineering and Electronics	4				15		30		135	90	225	5
26	Interchangeability and Technical Measurements		4			30		30		150	90	240	6
27	Optional Subject				4					30	30	60	1
27a	Specialized Sport Activities, part 4				4						30	30	1
27b	Sports Management, part 2				4						30	30	1
Total for the 4 semestar:		3	2		1	120		135	15	750	495	1245	30
28	Machine Elements, project			5					30	30	30	60	2
29	Cutting of Materials	5				30		15		150	105	255	6
30	Cutting Tools	5				15		30	15	135	90	225	6
31	Quality Management	5				30		30		150	90	240	6
32	Materials Selection for Engineering Design		5			30		30		150	90	240	6
33	3D Modelling		5			30		30		135	75	210	5
Total for the 5 semestar:		3	2	1		135		135	45	750	480	1230	31
34	Computer Systems for Mechanical Engineering		6			30		15	15	135	90	225	6
35	Machine Tools and Systems		6			30		15		105	60	165	4
36	Heat Treatment of Metals	6				30		15	15	135	90	225	6
37	Programming for CNC Machines	6				30		30		135	75	210	5
38	Manufacturing Technology, part 1	6				30		30		150	90	240	6
39	Reliability and Availability in Engineering Design		6			30		15		135	90	225	5
40	Specialized Practice				6					90	90	180	3
Total for the 6 semestar:		3	3		1	180		120	30	885	585	1470	35
41	Manufacturing Technology, part 2	7				30		30		150	90	240	6
42	Optional Subject			7					30	30	30	60	2
42a	Manufacturing Technology, project			7					30	30	30	60	2
42b	Cutting Tools, project			7					30	30	30	60	2
43	Optional Subject	7				30		30		150	90	240	6
43a	Design of Technology Equipment	7				30		30		60	90	150	6
43b	Manufacturing Engineering Processes Design	7				30		30		60	90	150	6
44	Programming for CIM and CNC	7				30		30		150	90	240	6
45	Optional Subject		7			15		15		105	75	180	4
45a	Manufacturing Process Management		7			15		15		30	75	105	4
45b	Operations Management Planning And Control		7			15		15		30	75	105	4
46	Process and Systems Risk Management	7				30		30		150	90	240	6
Total for the 7 semestar:		4	1	1		135		135	30	735	465	1200	30
47	Computer Integrated Technologies	8				30		30		150	90	240	6
48	Manufacturing Automation	8				30		15		150	105	255	6
49	Manufacturing Systems	8				30		30		150	90	240	6
50	Optional Subject			8					30	45	45	90	3
50a	Collaborative Product Development, project			8					30	30	45	75	3
50b	PDM Design, project			8					30	30	45	75	3
Total for the 8 semestar:		3		1		90		75	30	495	330	825	21

No	Subject Name	Types of term control				Semester auditorium load					Unsuper vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Total for all courses of education:		26	13	3	8	1035	75	930	210	5995	3955	9950	240

Facultative subjects

No	Subject Name	Types of term control				Semester auditorium load incl:					Unsuper-vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis / Preparation for State Examination	8	300	10
Defence of Diploma Thesis / State Examination	8		

Accepted from AU with

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Valid for 2016 / 2017 r. academic year.

Head of Department TMTM:

/ Assoc. Prof. PhD /

Dean of Faculty FMET:

/ Assoc. Prof. PhD Antonov G. /