

CURRICULUM
Bachelor's degree program in Mechanical Engineering
as of 2021/2022 academic year

ECTS Subject code T MECe No													
- T – type of course: B for BEng, M for MEng;													
- I - IV semester – fundamental subjects - professional field 5.1 Mechanical Engineering, 5.4 Electrical Power 5.5 Transport, shipping and aviation													
- MECe – “Mechanical Engineering” in English;													
- 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	MATe12	Mathematics Part I	30	30	0	60	150	210	1				7
2	PHYe01	Physics	45	15	30	90	120	210	1				7
3	CHEe01	Chemistry	30	0	15	45	105	150		1			5
4	CCEe23	Information and communication technologies	30	0	45	75	165	240	1				8
5	LNGe01	Foreign language I	0	30	0	30	30	60		1			2
6	SPRe01	Sports	0	0	0	0	30	30					1
Total			135	75	90	300	600	900	3	2	0	0	30
SEMESTER II													
7	MATe22	Mathematics Part II	30	30	0	60	120	180	1				6
8	ENGe01	Material Science	45	0	45	90	120	210	1			1	7
9	MECe01	Mechanics I	30	15	15	60	150	210	1			1	7
10	EEAe21	Electronics and Electrical engineering	30	0	30	60	90	150		1			5
11	LNGe02	Foreign language II	0	30	0	30	30	60		1			2
12	PRCe01	Practicum	0	0	0	0	60	60		1			2
13	SPRe02	Sports	0	0	0	0	30	30		1			1
Total			135	75	90	300	600	900	3	4	0	2	30
SEMESTER III													
14	MATe31	Mathematics Part III	30	30	0	60	120	180	1				6
15	MECe02	Mechanics II	30	0	30	60	150	210	1			1	7
16	MECe03	Strength of Materials	45	0	30	75	135	210	1			1	7
17	ENGe02	Engineering Graphics	30	0	45	75	105	180		1		1	6
18	CCEe24	Internet technologies	15	15	0	30	60	90		1			3
19	SPRe03	Sports	0	0	0	0	30	30		1			1
Total			150	45	105	300	600	900	3	3	0	3	30
SEMESTER IV													
20	MECe04	Machine Elements	45	15	30	90	120	210	1				7
21	MECe05	Hydraulic and pneumatic fluid power	45	0	30	75	105	180	1				6
22	ENRe01	Thermodynamics and heat transfer	30	0	30	60	90	150	1				5
23	MECe06	Theory of Mechanisms and Machines	30	15	15	60	120	180	1			1	6
24	MECe07	Machine Elements - Course project	0	0	0	0	90	90			1		3
25	PRCe02	Practicum	0	0	0	0	60	60		1			2
26	SPRe04	Sports	0	0	0	0	30	30		1			1
Total			150	30	105	285	615	900	4	2	1	1	30

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
27	BMECe01	Technology of Mechanical Engineering	45	0	30	75	105	180	1			1	6
28	BMECe02	Design of Automated Production Machines	30	0	30	60	120	180	1				6
29	BMECe03	Engineering Logistics	45	0	15	60	90	150	1				5
30	BMECe04	Quality Management and Control	30	0	30	60	90	150	1				5
31	BMECe05	Structural Non-metallic Composites	45	0	15	60	90	150		1			5
32	BMECe06	Design of Automated Production Machines - project	0	0	0	0	90	90			1		3
Total			195	0	120	315	585	900	4	1	1	1	30
SEMESTER VI													
33	BMECe07	Metrology and Measurement Devices	45	0	15	60	90	150	1				5
34	BMECe08	Economics	15	15	0	30	30	60		1			2
35	BMECe09	Reliability of Machines	45	0	15	60	90	150	1				5
36	BMECe10	Control and Regulation Systems	30	0	30	60	90	150	1				5
37	BMECe11	Materials Handling Equipment	30	0	15	45	75	120	1				4
38	BMECe12	Fine Mechanical and Optical Technique	30	0	15	45	75	120		1			4
39	BMECe13	Materials Handling Equipment - Course project	0	0	0	0	90	90			1		3
40	PRCe03	Practicum	0	0	0	0	60	60		1			2
Total			195	15	90	300	600	900	4	3	1	0	30
SEMESTER VII													
41	BMECe14	Precise Mechanical Technique	30	0	30	60	90	150	1				5
42	BMECe15	Application of Computer Modeling and Simulations in Engineering Analysis	30	0	15	45	105	150	1				5
43	BMECe16	Computer Integrated Manufacturing	45	0	30	75	105	180	1				6
44	BMECe17	Industrial Robots	30	0	30	60	90	150	1				5
45	BMECe18	Construction and Road Equipment	30	0	30	60	120	180		1			6
46	BMECe19	Precise Mechanical Technique - project	0	0	0	0	90	90			1		3
Total			165	0	135	300	600	900	4	1	1	0	30
SEMESTER VIII													
47	BMECe20	Programming of Automated Equipment	30	0	20	50	70	120	1			1	4
48	BMECe21	Modelling and Simulation of Mechanical Systems	20	0	20	40	80	120	1				4
49	BMECe22	Optional subject (List 1)	20	0	20	40	80	120	1				4
50	BMECe23	Kinematics and Dynamics of Lifting and Construction Manipulators	20	20	0	40	50	90	1				3
51	BMECe24	Optional subject (List 2)	15	15	0	30	60	90		1			3
52	PRCe04	Practicum	0	0	0	0	60	60		1			2
53	BMECe25	Diploma project	0	0	0	0	300	300	Defense of diploma thesis			10	
Total			105	35	60	200	700	900	4	2	0	1	30

LIST OF THE OPTIONAL SUBJECTS

List 1 BMECe22		ECTS = 4
1	Loading and Warehouse Logistics	BMECe22.1
2	Non-destructive Control	BMECe22.2
List 2 BMECe24		ECTS = 3
1	European Technical Legislation and Standardization	BMECe24.1
2	Management of Companies	BMECe24.2

LIST OF THE FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
1	FaSPR05	Sport	0	0	0	0	30	30		1			1
2	FaBMECe01	Introduction to Networking	30	0	30	60	90	150		1			5
SEMESTER VI													
1	FaSPR06	Sport	0	0	0	0	30	30		1			1
2	FaBMECe02	Computer Design of Mechanical Drives and Constructions	30	0	30	60	90	150		1			5
SEMESTER VII													
1	FaSPR07	Sport	0	0	0	0	30	30		1			1
2	FaBMECe03	Business Ethics	30	15	0	45	75	120		1			4
SEMESTER VIII													
1	FaSPR08	Sport	0	0	0	0	30	30		1			1