Master's degree program in IT FOR BUSINESS MANAGEMENT
as of 2017/2018 academic year

Curriculum

ECTS Subject code **T ITBM e No**
- **T** - type of course: **M** for MEng
- **ITBM** – **Information technology for business management**, **e** - teaching language English
- **No** - subsequent number of the subject

Lectures (L), tutorials (Tut.), labs (Lab.) weekly;
exam (E), continuous assessment (CA); semester projects (SP)/ semester assignment (course work) (SA)

No	SUBJECT	Week Load						Assessment				ECTS subject code	ECTS credits
		L	Tut.	Lab.	Acad. total	Self study	Total	E	CA	SP	SA		
SEMESTER I													
1	ERP systems	2	0	1	3	6	9	1			1	**MITBMe01**	**5**
2	E-Commerce	2	0	1	3	5	8	1			1	**MITBMe02**	**5**
3	Business Intelligence	2	0	1	3	5	8	1				**MITBMe03**	**5**
4	Next Generation Business Application	2	0	1	3	5	8	1				**MITBMe04**	**5**
5	Managing Information Services in an Organization	2	0	1	3	5	8		1			**MITBMe05**	**4**
6	Optional Subject from list L1	2	0	1	3	5	8		1			**MITBMe06**	**4**
7	Course Project	0	0	0	0	1	1			1		**MITBMe07**	**2**
	Total	**12**	**0**	**6**	**18**	**32**	**50**	**4**	**2**	**1**	**2**		**30**
SEMESTER II													
8	Information Technology Strategies Development	2	0	1	3	6	9	1			1	**MITBMe08**	**5**
9	Project Management	2	0	1	3	5	8	1			1	**MITBMe09**	**5**
10	IT for Business Transformation	2	0	1	3	5	8	1				**MITBMe10**	**5**
11	Human resources	2	0	1	3	5	8	1				**MITBMe11**	**5**
12	IT Solutions in Various Industries	2	0	1	3	5	8		1			**MITBMe12**	**4**
13	Optional Subject from list L2	2	0	1	3	5	8		1			**MITBMe13**	**4**
14	Course Project	0	0	0	0	1	1			1		**MITBMe14**	**2**
	Total	**12**	**0**	**6**	**18**	**32**	**50**	**4**	**2**	**1**	**2**		**30**
SEMESTER III													
12	Final Year Project							Final Year Project Presentation				**MITBMe15**	**15**
Total													**15**

OPTIONAL SUBJECTS LIST

List 1 (MITBMe06 – ECTS 4)

MITBMe06.1 – Financial Management for IT
MITBMe06.2- Programming environments and technologies
MITBMe06.3- Information technologies for Business Management
MITBMe06.4- Client-server technology

List 2 (MITBMe13 – ECTS 4)

MITBMe13.1- Planning operations in manufacturing and serving enterprises
MITBMe13.2- Managing IS
MITBMe13.3- Organizational behavior
MITBMe13.4- Knowledge management

CURRICULUM
Bachelor's degree program in Computer Science and Engineering
as of 2020/2021 academic year

ECTS Subject code T CSE No
- T – type of course: B for BEng, M for MEng;
- I - IV semester – fundamental subjects - professional field 5.3. Communications and Computer Engineering;
- CSC – specialty "Computer Science and 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	**MATe13**	Mathematics I	30	30	0	***60***	120	***180***	1				**6**
2	**PHYe03**	Physics	30	15	15	***60***	120	***180***	1				**6**
3	**CCEe01**	Introduction to Programming	30	15	30	***75***	135	***210***	1				**7**
4	**ENGe04**	Fundamentals of Engineering	30	15	30	***75***	135	***210***		1			**7**
5	**LNGe11**	Design	0	30	0	***30***	60	***90***		1			**3**
6	**SPRe01**	Foreign Language I	0	0	0	***0***	30	***30***		1			**1**
Total			**120**	**105**	**75**	**300**	**600**	**900**	**3**	**3**	**0**	**0**	**30**
SEMESTER II													
7	**MATe22**	Mathematics II	30	30	0	***60***	120	***180***	1				**6**
8	**ENGe05**	Materials Science	30	0	30	***60***	120	***180***	1				**6**
9	**CCEe02**	Fundamentals of Programming Languages	30	15	30	***75***	105	***180***	1				**6**
10	**EEAe24**	Electrical Engineering	30	15	15	***60***	120	***180***		1			**6**
11	**LNGe21**	Foreign Language II	0	30	0	***30***	60	***90***		1			**3**
12	**PRCe01**	Practicum in Communications and Computer Engineering	0	0	0	***0***	60	***60***		1			**2**
13	**SPRe02**	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**120**	**90**	**75**	**285**	**615**	**900**	**3**	**4**	**0**	**0**	**30**
SEMESTER III													
14	**MATe33**	Mathematics III	30	30	0	***60***	120	***180***	1				**6**
15	**EEAe25**	Semiconductor Devices	30	0	30	***60***	120	***180***		1			**6**
16	**MECe24**	Mechanical Systems	30	0	15	***45***	75	***120***		1			**4**
17	**CCEe03**	Platform Independent Programming Languages	30	15	30	***75***	135	***210***	1				**7**
18	**CCEe04**	Synthesis and Analysis of Algorithms	30	0	30	***60***	120	***180***	1			1	**6**
19	**SPRe03**	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**150**	**45**	**105**	**300**	**600**	**900**	**3**	**3**	**0**	**1**	**30**
SEMESTER IV													
20	**CCEe05**	Computer Systems	30	0	30	***60***	90	***150***	1				**5**
21	**CCEe06**	Signals and Systems	30	15	15	***60***	90	***150***	1			1	**5**
22	**CCEe07**	Fundamentals of Computer and Communication Networks	30	0	30	***60***	90	***150***	1			1	**5**
23	**CCEe08**	Databases	30	0	30	***60***	120	***180***		1			**6**
24	**EEAe26**	Measurements in Communications and Computer Engineering	30	0	15	***45***	75	***120***		1			**4**
25	**CCEe09**	Databases – project	0	0	0	***0***	60	***60***			1		**2**
26	**PRCe02**	Practicum in Communications and Computer Engineering	0	0	0	***0***	60	***60***		1			**2**
27	**SPRe04**	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**150**	**15**	**120**	**285**	**615**	**900**	**3**	**4**	**1**	**2**	**30**

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
28	**BCSCe01**	Computer Architectures	30	0	15	***45***	75	***120***	1			1*	**4**
29	**BCSCe02**	Fundamentals of Logic Design	30	15	15	***60***	90	***150***	1			1*	**5**
30	**BCSCe03**	Operating Systems	30	0	15	***45***	105	***150***	1			1*	**5**
31	**BCSCe04**	Programming Languages	30	0	30	***60***	90	***150***		1		1*	**5**
32	**BCSCe05**	Advanced Software Technologies (C#)	30	0	15	***45***	75	***120***	1			1*	**4**
33	**BCSCe06**	Software Design and Software Testing	30	0	30	***60***	90	***150***		1		1*	**5**
34	**BCSCe07**	Project (on selected discipline №28–33)	0	0	0	***0***	60	***60***			1		**2**
Total			**180**	**15**	**120**	**315**	**585**	**900**	**4**	**2**	**1**	**2**	**30**
SEMESTER VI													
35	**BCSCe08**	Agent Based Technologies	30	0	15	***45***	105	***150***	1			1*	**5**
36	**BCSCe09**	High Performance Computer Systems	30	0	30	***60***	90	***150***	1			1*	**5**
37	**BCSCe10**	Development of Linux-based software	30	0	15	***45***	75	***120***		1		1*	**4**
38	**BCSCe11**	Programming Environments	30	0	30	***60***	90	***150***	1			1*	**5**
39	**BCSCe12**	Computer Graphics	30	0	30	***60***	90	***150***	1			1*	**5**
40	**BCSCe13**	Elective Discipline (List 1)	30	0	15	***45***	75	***120***		1		1*	**4**
41	**BCSCe14**	Semester Project (on selected discipline №35–40)	0	0	0	***0***	60	***60***			1		**2**
Total			**180**	**0**	**135**	**315**	**585**	**900**	**4**	**2**	**1**	**2**	**30**
SEMESTER VII													
42	**BCSCe15**	Parallel Programming	30	0	30	***60***	90	***150***	1			1*	**5**
43	**BCSCe16**	Programming Technologies for Secure Code	30	0	30	***60***	90	***150***		1		1*	**5**
44	**BCSCe17**	Web Programming Fundamentals	30	0	30	***60***	90	***150***	1			1*	**5**
45	**BCSCe18**	Artificial Intelligence	30	0	15	***45***	75	***120***	1			1*	**4**
46	**BCSCe19**	Metaheuristics	30	0	15	***45***	75	***120***	1			1*	**4**
47	**BCSCe20**	Elective Discipline (List 2)	30	0	15	***45***	105	***150***		1			**5**
48	**BCSCe21**	Semester Project (on selected discipline №42–47)	0	0	0	***0***	60	***60***			1		**2**
Total			**180**	**0**	**135**	**315**	**585**	**900**	**4**	**2**	**1**	**2**	**30**
SEMESTER VIII													
49	**BCSCe22**	Information Security	20	10	10	***40***	80	***120***	1			1**	**4**
50	**BCSCe23**	Multimodal Systems	20	10	10	***40***	80	***120***	1			1**	**4**
51	**BCSCe24**	Elective Discipline (List 3)	20	5	10	***35***	85	***120***	1			1**	**4**
52	**BCSCe25**	Elective Discipline (List 4)	20	5	10	***35***	85	***120***		1		1**	**4**
53	**BCSCe26**	Elective Discipline (List 5)	20	15	0	***35***	85	***120***		1		1**	**4**
54	**BCSCe27**	Diploma project	0	0	0	***0***	300	***300***	Defense of diploma				**10**
Total			**100**	**45**	**40**	**185**	**715**	**900**	**3**	**2**	**0**	**1**	**30**

*Remark: Students prepare two courseworks, the disciplines of the semester project and the coursework should be different.

**Remark: Students prepare one coursework on selected discipline.

LIST OF THE OPTIONAL SUBJECTS

List 1 Elective Discipline (semester 6)		**ECTS = 4**
1	Discrete Structures	**BCSCe13.1**
2	Embedded Systems	**BCSCe13.2**
3	Java Technologies	**BCSCe13.3**
List 2 Elective Discipline (semester 7)		**ECTS = 5**
1	Programmable Logic Systems	**BCSCe20.1**
2	Software Patterns	**BCSCe20.2**
List 3 Elective Discipline (semester 8)		**ECTS = 4**
1	Distributed Systems and Computer Communications	**BCSCe24.1**
2	Bioinformatics	**BCSCe24.2**
List 4 Elective Discipline (semester 8)		**ECTS = 4**
1	Intelligent Systems	**BCSCe25.1**
2	Programming for Embedded Systems	**BCSCe25.2**
3	Virtual Reality	**BCSCe25.3**
List 5 Elective Discipline (semester 8)		**ECTS = 4**
1	Innovation Management and Entrepreneurship	**BCSCe26.1**
2	Management of IT Projects	**BCSCe26.2**

LIST OF THE FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER II													
1	**FaBCSCe01**	Bulgarian Language	0	30	0	***30***	60	***90***					**3**
SEMESTER V													
1	**FaBCSCe02**	Elective Humanitarian Discipline (List 6)	30	15	0	***45***	45	***90***		1			**3**
2	**FaSPR05**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VI													
1	**FaBCSCe03**	Elective Law Discipline (List 7)	30	15	0	***45***	45	***90***		1			**3**
2	**FaSPR06**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VII													
1	**FaSPR07**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VIII													
1	**FaSPR08**	Sport	0	0	0	***0***	30	***30***		1			**1**
List 12 Elective Humanitarian Discipline													**ECTS = 3**
1	The Global Society and Technologies												**FaBCSCe02.1**
2	Research and Analysis of Digital Content												**FaBCSCe02.2**
3	Business Ethics												**FaBCSCe02.3**
List 13 Elective Law Discipline													**ECTS = 3**
1	Information Technologies Law												**FaBCSCe03.1**
2	Tech Giants and Legal Protection of Competition												**FaBCSCe03.2**
3	Protection of Intellection Property												**FaBCSCe03.3**

CURRICULUM
Bachelor's degree program in INDUSTRIAL ENGINEERING in English
as of 2020/2021 academic year

ECTS Subject code T IEe No
- T – type of course: B for BEng, M for MEng;
- I - IV semester – fundamental subjects - professional field 5.13. General Engineering;
- BIEe – "Industrial 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	BIEe01	Mathematics I	22	20	0	***42***	108	***150***	1				**5**
2	BIEe02	Physics I	22	20	15	***57***	93	***150***	1				**5**
3	BIEe03	Chemistry	22	0	15	***37***	83	***120***		1			**4**
4	BIEe04	Mechanics I	22	15	0	***37***	83	***120***	1				**4**
5	BIEe05	Applied Geometry and Engineering Graphics	15	0	30	***45***	*75*	***120***		1		1	**4**
6	BIEe06	Computing I	15	15	22	***52***	68	***120***		1			**4**
7	BIEe07	Introduction to Manufacturing and Industrial Practice I	0	0	0	***0***	*30*	***30***		1			**1**
8	BIEe08	English Language	0	30	0	***30***	*30*	***60***		1			**2**
9	BIEe09	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**118**	**100**	**82**	**300**	**600**	**900**	**3**	**6**	**0**	**1**	**30**
SEMESTER II													
10	BIEe10	Mathematics II	22	15	0	***37***	83	***120***	1				**4**
11	BIEe11	Physics II	22	15	12	***49***	71	***120***	1				**4**
12	BIEe12	Mechanics II	22	15	0	***37***	53	***90***	1			1	**3**
13	BIEe13	Computing II	15	0	12	***27***	63	***90***		1			**3**
14	BIEe14	Electrical Engineering I	22	15	12	***49***	101	***150***		1			**5**
15	BIEe15	Electronics I	22	0	12	***34***	86	***120***		1		1	**4**
16	BIEe16	Materials Science	22	0	15	***37***	53	***90***		1			**3**
17	BIEe17	English Language	0	30	0	***30***	30	***60***		1			**2**
18	BIEe18	Introduction to Manufacturing and Industrial Practice II	0	0	0	***0***	30	***30***		1			**1**
19	BIEe19	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**147**	**90**	**63**	**300**	**600**	**900**	**3**	**7**	**0**	**2**	**30**
SEMESTER III													
20	BIEe20	Mathematics III	22	16	0	***38***	82	***120***	1				**4**
21	BIEe21	Strength of Materials	22	16	15	***53***	97	***150***	1			1	**5**
22	BIEe22	Electrical Engineering II	22	16	15	***53***	97	***150***	1			1	**5**
23	BIEe23	Electronics II	24	0	21	***45***	75	***120***		1			**4**
24	BIEe24	Computing III	16	0	21	***37***	83	***120***		1			**4**
25	BIEe25	Economics	22	15	0	***37***	53	***90***		1			**3**
26	BIEe26	Measurements and Instrumentation I	22	0	15	***37***	83	***120***		1			**4**
27	BIEe27	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**150**	**63**	**87**	**300**	**600**	**900**	**3**	**5**	**0**	**2**	**30**
SEMESTER IV													
28	BIEe28	Control Theory I	26	0	15	***41***	79	***120***		1			**4**
29	BIEe29	Fluid Mechanics	15	15	15	***45***	75	***120***	1				**4**
30	BIEe30	Principles of Mechanical Engineering Design	26	15	15	***56***	64	***120***	1				**4**
31	BIEe31	Computing IV	15	0	15	***30***	60	***90***		1			**3**
32	BIEe32	Measurements and Instrumentation II	15	0	30	***45***	75	***120***	1				**4**
33	BIEe33	Enterprise Management	26	16	0	***42***	78	***120***	1				**4**
34	BIEe34	Operations Research	26	15	0	***41***	79	***120***		1			**4**
35	BIEe35	Industrial Training	0	0	0	***0***	30	***30***		1			**1**
36	BIEe36	Principles of Mechanical Engineering Design - project	0	0	0	***0***	30	***30***			1		**1**
37	BIEe37	Sport	0	0	0	***0***	30	***30***		1			**1**
Total			**149**	**61**	**90**	**300**	**600**	**900**	**4**	**5**	**1**	**0**	**30**

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
38	BIEe38	Mathematics IV	22	16	0	***38***	82	***120***	1				**4**
39	BIEe39	Control Theory II	15	18	15	***48***	102	***150***	1				**5**
40	BIEe40	Materials Technology	26	0	15	***41***	79	***120***	1				**4**
41	BIEe41	Computer Aided Design	22	0	15	***37***	83	***120***		1		1	**4**
42	BIEe42	Industrial Manufacturing Systems I	22	18	0	***40***	80	***120***		1		1	**4**
43	BIEe43	Production Operation Management I	22	18	0	***40***	80	***120***		1			**4**
44	BIEe44	Measurements Systems	26	0	30	***56***	64	***120***	1				**4**
45	BIEe45	Project of choice by BIEe38, BIEe39, BIEe40, BIEe43, BIEe44	0	0	0	***0***	30	***30***			1		**1**
Total			**155**	**70**	**75**	**300**	**600**	**900**	**4**	**3**	**1**	**2**	**30**
SEMESTER VI													
46	BIEe46	Industrial Manufacturing Systems II	24	15	15	***54***	96	***150***	1				**5**
47	BIEe47	Thermodynamics and Heat	22	15	15	***52***	98	***150***	1				**5**
48	BIEe48	Technical Safety	16	0	15	***31***	59	***90***		1			**3**
49	BIEe49	Production Operation Management II	22	15	0	***37***	83	***120***	1				**4**
50	BIEe50	Manufacturing Design I	22	0	30	***52***	68	***120***		1			**4**
51	BIEe51	Human Resource Management	22	15	0	***37***	83	***120***		1			**4**
52	BIEe52	Manufacturing Design I - project	0	0	0	***0***	30	***30***			1		**1**
53	BIEe53	Optional Subject from list L1	22	0	15	***37***	83	***120***		1			**4**
Total			**150**	**60**	**90**	**300**	**600**	**900**	**3**	**4**	**1**	**0**	**30**
SEMESTER VII													
54	BIEe54	Quality Control	26	15	15	***56***	94	***150***	1				**5**
55	BIEe55	Control Engineering	26	0	15	***41***	79	***120***	1				**4**
56	BIEe56	Systems Modelling and Simulation	26	0	15	***41***	79	***120***		1		1	**4**
57	BIEe57	Manufacturing Design II	26	0	15	***41***	79	***120***	1				**4**
58	BIEe58	Computer Integrated Manufacturing I	26	0	15	***41***	79	***120***		1			**4**
59	BIEe59	Elements of Industrial Automation	26	0	15	***41***	79	***120***	1				**4**
60	BIEe60	Manufacturing Design II - project	0	0	0	***0***	30	***30***			1		**1**
61	BIEe61	Optional Subject from list L2	24	0	15	***39***	81	***120***		1			**4**
SEMESTER VIII													
62	BIEe62	Computer Integrated Manufacturing II	20	0	15	***35***	55	***90***		1			**3**
63	BIEe63	Environmental Production Engineering	20	0	15	***35***	55	***90***		1			**3**
64	BIEe64	Manufacturing Strategies	20	20	0	***40***	80	***120***		1			**4**
65	BIEe65	Financial Accounting	20	20	0	***40***	80	***120***		1			**4**
66	BIEe66	Optional Subject List L3	15	0	10	***25***	65	***90***	1				**3**
67	BIEe67	Optional Subject List L4	15	0	10	***25***	65	***90***	1				**3**
68	BIEe68	Diploma project	0	0	0	***0***	300	***300***	Defense of diploma thesis				**10**
Total			**110**	**40**	**50**	**200**	**700**	**900**	**2**	**4**	**0**	**0**	**30**

LIST OF THE OPTIONAL SUBJECTS

List 1		**ECTS = 4**
1	Vibrations and Dynamics	**BIEe53.1**
2	Nonlinear Systems and Neural Networks	**BIEe53.2**
3	Geographic Information Systems	**BIEe53.3**
List 2		**ECTS = 4**
1	Multidimensional Systems	**BIEe61.1**
2	Introduction to Business Intelligence	**BIEe61.2**
3	Fundamentals of Telecommunications Engineering	**BIEe61.3**
List 3		**ECTS = 3**
1	Networks Communications in Process Control Systems	**BIEe66.1**
2	XML Based CAD/CAM/CAx Integration	**BIEe66.2**
3	Mechanical Fundamentals of Microelectromechanical Systems	**BIEe66.3**
List 4		**ECTS = 3**
1	Finite Element Structures Analyses	**BIEe67.1**
2	Manufacturing in Electronics Industry	**BIEe67.2**
3	Corrosions of Metals and Methods of Protection	**BIEe67.3**
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	**FaBBIEe1**	Bulgarian Language (for foreigners)	0	30	0	***30***	30	***60***		1			**2**
SEMESTER II													
1	**FaBBIEe2**	Bulgarian Language (for foreigners)	0	30	0	***30***	30	***60***		1			**2**
SEMESTER V													
1	**FaBBIEe3**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VI													
1	**FaBBIEe4**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VII													
1	**FaBBIEe5**	Sport	0	0	0	***0***	30	***30***		1			**1**
SEMESTER VIII													
1	**FaBBIEe6**	Sport	0	0	0	***0***	30	***30***		1			**1**

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	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	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**

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

ECTS Subject code T EEe No
- T – type of course: B for BEng, M for MEng;
- I - IV semester – fundamental subjects - professional field 5.2. Electrical Engineering, Electronics and Automation;
- EEe – specialty "Electrical 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	**MATe11**	Mathematics I	45	30	0	***75***	165	***240***	1				**8**
2	**PHYe02**	Physics	30	30	15	***75***	165	***240***	1				**8**
3	**CHEe02**	Chemistry	15	0	30	***45***	105	***150***	1				**5**
4	**ENGe06**	Fundamentals of Engineering Design	15	0	45	***60***	120	***180***		1		1	**6**
5	**LNGe01**	Foreign Language I	0	30	0	***30***	30	***60***		1			**2**
6	**SPRe01**	Sport	0	0	0	***0***	30	***30***		1			**1**
TOTAL			**105**	**90**	**90**	**285**	**615**	**900**	**3**	**3**	**0**	**1**	**30**
SEMESTER II													
7	**MATe21**	Mathematics II	45	30	0	***75***	135	***210***	1				**7**
8	**EEAe01**	Electrical Materials	30	0	30	***60***	90	***150***	1				**5**
9	**CCEe26**	Programming I	30	0	30	***60***	90	***150***		1		1	**5**
10	**MECe22**	Mechanics	30	30	0	***60***	90	***150***	1				**5**
11	**EEAe02**	Technical Safety	30	0	15	***45***	105	***150***		1			**5**
12	**PRCe01**	Practicum	0	0	0	***0***	60	***60***		1			**2**
13	**SPRe02**	Sport	0	0	0	***0***	30	***30***		1			**1**
TOTAL			**165**	**60**	**75**	**300**	**600**	**900**	**3**	**4**	**0**	**1**	**30**
SEMESTER III													
14	**EEAe03**	Theoretical Electrical Engineering I	30	30	15	***75***	165	***240***	1			1	**8**
15	**EEAe04**	Electrical Measurements	30	0	30	***60***	120	***180***	1				**6**
16	**MECe23**	Mechanical Systems	30	0	15	***45***	105	***150***		1			**5**
17	**EEAe05**	Semiconductor Devices	30	0	30	***60***	90	***150***	1				**5**
18	**EEAe06**	Electronic Circuits Theory	30	0	30	***60***	90	***150***		1			**5**
19	**SPRe03**	Sport	0	0	0	***0***	30	***30***		1			**1**
TOTAL			**150**	**30**	**120**	**300**	**600**	**900**	**3**	**3**	**0**	**1**	**30**
SEMESTER IV													
20	**EEAe07**	Theoretical Electrical Engineering II	30	30	15	***75***	135	***210***	1			1	**7**
21	**CCEe27**	Programming and Tools for Mathematical Modeling	15	0	30	***45***	75	***120***		1		1	**4**
22	**EEAe08**	Automatic Control Theory	30	0	30	***60***	90	***150***	1				**5**
23	**EEAe09**	Digital electronics	30	0	30	***60***	90	***150***	1				**5**
24	**CCEe28**	Fundamentals of Telecommunications	30	0	15	***45***	75	***120***		1			**4**
25	**EEAe10**	Digital electronics – project	0	0	0	***0***	60	***60***			1		**2**
26	**PRCe02**	Practicum	0	0	0	***0***	60	***60***		1			**2**
27	**SPRe04**	Sport	0	0	0	***0***	30	***30***		1			**1**
TOTAL			**135**	**30**	**120**	**285**	**615**	**900**	**3**	**4**	**1**	**2**	**30**

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
28	**BEEe01**	Electrical Machines I	45	0	30	***75***	105	***180***	1			1	**6**
29	**BEEe02**	Electrical Apparatus I	45	0	30	***75***	105	***180***	1			1	**6**
30	**BEEe03**	High Voltage Tengineering	30	0	30	***60***	90	***150***	1				**5**
31	**BEEe04**	Embedded systems and programmable controllers	45	0	0	***45***	75	***120***	1				**4**
32	**BEEe05**	Lighting and Installation Technology	30	0	15	***45***	75	***120***		1			**4**
33	**BEEe06**	Energy technology	15	0	0	***15***	75	***90***		1			**3**
34	**BEEe07**	Embedded systems and programmable controllers – project	0	0	0	***0***	60	***60***			1		**2**
TOTAL			**210**	**0**	**105**	**315**	**585**	**900**	**4**	**2**	**1**	**2**	**30**
SEMESTER VI													
35	**BEEe08**	Electrical Machines II	45	0	30	***75***	105	***180***	1			1	**6**
36	**BEEe09**	Electrical Apparatus II	45	0	30	***75***	105	***180***	1			1	**6**
37	**BEEe10**	Electrical converters and energy efficiency	45	0	25	***70***	110	***180***	1				**6**
38	**BEEe11**	Design of Electrical Machines	45	0	20	***65***	115	***180***	1				**6**
39	**BEEe12**	Economics of the electrical industry	30	0	0	***30***	90	***120***		1			**4**
40	**BEEe13**	Design of Electrical Machines– project	0	0	0	***0***	60	***60***			1		**2**
TOTAL			**210**	**0**	**105**	**315**	**585**	**900**	**4**	**1**	**1**	**2**	**30**
SEMESTER VII													
41	**BEEe14**	Electrical drives	45	0	25	***70***	110	***180***	1				**6**
42	**BEEe15**	Electrical Power Engineering	45	0	0	***45***	105	***150***	1				**5**
43	**BEEe16**	Switchgear and controlgear	45	0	25	***70***	110	***180***	1				**6**
44	**BEEe17**	Industrial Technologies in Electrical Engineering and Electronics	45	0	25	***70***	110	***180***	1				**6**
45	**BEEe18**	Ecology and Renewable Energy Sources	40	0	20	***60***	90	***150***		1			**5**
46	**BEEe19**	Switchgear and controlgear– project	0	0	0	***0***	60	***60***			1		**2**
TOTAL			**220**	**0**	**95**	**315**	**585**	**900**	**4**	**1**	**1**	**0**	**30**
SEMESTER VIII													
47	**BEEe20**	Elective subject* (List 1)	30	0	20	***50***	100	***150***	1			1	**5**
48	**BEEe21**	Elective subject* (List 2)	30	0	15	***45***	105	***150***	1				**5**
49	**BEEe22**	Elective subject* (List 3)	30	0	15	***45***	105	***150***	1				**5**
50	**BEEe23**	Elective subject* (List 4)	30	0	15	***45***	105	***150***	1				**5**
51	**BEEe24**	Diploma project	0	0	0	***0***	300	***300***	Defense of diploma thesis				**10**
TOTAL			**120**	**0**	**65**	**185**	**715**	**900**	**4**	**0**	**0**	**1**	**30**

Remark:

The form of control (Current assessment) in the disciplines "Sport" and "Practicum" is "Respected / Not respected".

LIST OF THE OPTIONAL SUBJECTS

List 1 Compulsury elective subject		**ECTS = 5**
1	Computer modeling of fields and processes	**BEEe20.1**
2	Computer Aided Design of Electrical Apparatus	**BEEe20.2**
List 2 Compulsury elective subject		**ECTS = 5**
1	Electromagnetic and electromechanical system	**BEEe21.1**
2	High voltage electrical apparatus	**BEEe21.2**
List 3 Compulsury elective subject		**ECTS = 5**
1	Electrical Machines with Electronic Control	**BEEe22.1**
2	Contactless devices and hybrid circuit breakers	**BEEe22.2**
List4 Elective subject		**ECTS = 5**
1	Test methods, monitoring and diagnostics of electromechanical systems	**BEEe23.1**
2	Electrotechnology	**BEEe23.2**

LIST OF THE FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
СЕМЕСТЪР II													
1	**FaLNGe21**	Foreign Language II	0	30	0	***30***	30	***60***		1			**2**
СЕМЕСТЪР V													
1	**FaSPRe05**	Sport	0	0	0	***0***	30	***30***		1			**1**
СЕМЕСТЪР VI													
1	**FaSPRe06**	Sport	0	0	0	***0***	30	***30***		1			**1**
СЕМЕСТЪР VII													
1	**FaSPRe07**	Sport	0	0	0	***0***	30	***30***		1			**1**
2	**FaBEEe01**	Facultative subject (List 5)	30	0	30	***60***	90	***150***	1				**5**
СЕМЕСТЪР VIII													
1	**FaSPRe08**	Sport	0	0	0	***0***	30	***30***		1			**1**
1	**FaBEEe02**	Facultative subject (List 6)	0	0	0	***0***	30	***30***		1			**1**

LIST OF FACULTATIVE SUBJECTS

List 5 Facultative subject		**ECTS = 5**
1	Multimedia engineering presentations	**FaBEEe01.1**
2	Electrical Contact	**FaBEEe01.2**
3	Electrical sensors	**FaBEEe01.3**
4	Industrial technologies	**FaBEEe01.4**
5	Neural networks and deep learning	**FaBEEe01.5**
List 6 Facultative subject		**ECTS = 5**
1	Electromagnetic and electromechanical system	**FaBEEe02.1**
2	Electrical Apparatus in Automation	**FaBEEe02.2**
3	Electrical discharges and plasma technologies	**FaBEEe02.3**
4	Production technologies	**FaBEEe02.4**
5	Introduction to network technologies	**FaBEEe02.5**