CURRICULUM

Magister's degree program in Electical Engineering

ECTS Subject code Tp EE 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;
- p - additional symbol for branch Plovdiv, in which the specialty is taught; EE – specialty "Electrical Engineering" 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.	LU	AT	SS	Total	E	CA	SP	SA	
SEMESTER I													
1	**MpEE41**	Electrical machines I p.	45	0	30	***75***	135	***210***	1			1	**7**
2	**MpEE42**	Electrical apparatus I p.	45	0	30	***75***	135	***210***	1			1	**7**
3	**MpEE43**	Electrical power engineering	45	0	0	***45***	135	***180***	1				**6**
4	**MpEE44**	High voltage engineering	30	0	30	***60***	90	***150***		1			**5**
5	**MpEE45**	Technologies in electrical engineering and electronics	30	0	25	***55***	95	***150***		1			**5**
TOTAL			**195**	**0**	**115**	**310**	**590**	**900**	**3**	**2**	**0**	**2**	**30**
SEMESTER II													
6	**MpEE46**	Electrical machines II p.	45	0	30	***75***	165	***240***	1				**8**
7	**MpEE47**	Electrical apparatus II p.	45	0	30	***75***	135	***210***	1			1	**7**
8	**MpEE48**	Electrical grids and systems	30	0	15	***45***	105	***150***	1			1	**5**
9	**MpEE49**	CAD systems in electrical engineering	30	0	20	***50***	70	***120***		1			**4**
10	**MpEE50**	Electrical converters and energy efficiency	30	0	25	***55***	125	***180***	1				**6**
TOTAL			**180**	**0**	**120**	**300**	**600**	**900**	**4**	**1**	**0**	**2**	**30**
SEMESTER III													
11	**MpEE01**	Measurement tools and systems	30	0	30	***60***	90	***150***	1				**5**
12	**MpEE02**	Numerical methods and modeling of circuits	30	0	30	***60***	90	***150***	1				**5**
13	**MpEE03**	High voltage electric machines and apparatus	30	0	30	***60***	90	***150***	1			1	**5**
14	**MpEE04**	Optional subject 1 (from List 1)	30	0	30	***60***	90	***150***	1				**5**
15	**MpEE05**	Optionalsubject 2 (from List 2)	30	0	30	***60***	90	***150***	1		1		**5**
16	**MpEE06**	Optionalsubject 3 (from List 3)	30	0	30	***60***	90	***150***		1			**5**
TOTAL			**180**	**0**	**180**	**360**	**540**	**900**	**5**	**1**	**1**	**1**	**30**
SEMESTER IV													
17	**MpEE07**	Numerical methods and modeling of fields	30	0	30	***60***	60	***120***	1				**4**
18	**MpEE08**	Quality Management	20	20	0	***40***	50	***90***		1			**3**
19	**MpEE09**	Introduction to informatics	0	0	20	***20***	40	***60***		1			**2**
20	**MpEE10**	Optional subject 4 (from List 4))	20	0	20	***40***	50	***90***	1				**3**
21	**MpEE11**	Optional subject 5 (from List 5)	20	20	0	***40***	50	***90***		1			**3**
22	**MpEE12**	Diploma project	0	0	0	***0***	450	***450***	Diploma project defense				**15**
TOTAL			**90**	**40**	**70**	**200**	**700**	**900**	**2**	**3**	**0**	**0**	**30**

*Note:

LISTS OF OPTIONAL SUBJECTS

List 1 - MpEE04		**ECTS = 5**
1	Protection of electrical equipment	**MpEE04.1**
2	European standards in electrical engineering	**MpEE04.2**
List 2 – MpEE05		**ECTS = 5**
1	Vector control of electrical machines	**MpEE05.1**
2	Computer simulation of processes and electrical systems with commutation	**MpEE05.2**
3	Electric power supply and equipment	**MpEE05.3**
4	Engineering optimization methods	**MpEE05.4**
List 3 – MpEE06		**ECTS = 5**
1	Special electric machines and apparatus	**MpEE06.1**
2	Electronic devices in transport	**MpEE06.2**
3	Special construction and electrical materials	**MpEE06.3**
List 4 - MpEE10		**ECTS = 3**
1	Transient processes in electric power grids and electric power systems	**MpEE10.1**
2	Design of converters	**MpEE10.2**
3	Buildings automation equipment	**MpEE10.3**
List 5 - MpEE11		**ECTS = 3**
1	Industrial legislation	**MpEE11.1**
2	Marketing	**MpEE11.2**

LISTS OF FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	LU	AT	SS	Total	E	CA	SP	SA	
SEMESTER III													
1	**FaMpEE01**	Time series forecasting	20	0	20	***40***	50	***90***		1			**3**
2	**FaMpEE02**	Power supply devices	20	0	20	***40***	50	***90***		1			**3**
SEMESTER IV													
3	**FaMpEE03**	Mathematical methods for digital processing	20	0	20	***40***	50	***90***		1			**3**

Note : 1. The lists of optional and facultative subjects are updated annually and are accepted by the Faculty Council of the Faculty of Electronics and Automation.

2. The facultative course schedule will be announced by the faculty office.

Date: 15.03.2024 г. Dekan FEA :

Assoc. prof. PhD eng. Mitko Shopov

Acsepted by FEA FC 14.03.2024 г. with Protocol № 8