

CURRICULUM

Magister's degree program in Electrical 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	MpEE21	Theoretical electrical engineering	45	30	15	90	120	210	1			1	7
2	MpEE22	Electrical measurements	30	0	30	60	120	180	1				6
3	MpEE23	Electrical apparatus	45	0	30	75	135	210	1			1	7
4	MpEE24	Electrical power engineering	45	0	0	45	105	150	1				5
5	MpEE25	High voltage engineering	30	0	30	60	90	150		1			5
TOTAL			195	30	105	330	570	900	4	1	0	2	30
SEMESTER II													
6	MpEE26	Electrical machines	45	0	30	75	135	210	1			1	7
7	MpEE27	Electrical measurements	30	0	30	60	90	150	1				5
8	MpEE28	Electrical grids and systems	30	0	15	45	105	150	1			1	5
9	MpEE29	CAD systems in electrical engineering	30	0	20	50	70	120		1			4
10	MpEE30	Electrical converters and energy efficiency	30	0	25	55	95	150	1				5
11	MpEE31	Electromagnetic compatibility	30	0	15	45	75	120		1			4
TOTAL			195	0	135	330	570	900	4	2	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	Optional subject 2 (from List 2)	30	0	30	60	90	150	1		1		5
16	MpEE06	Optional subject 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

Accepted by FEA FC

14.03.2024 г.

with Protocol № 8