

CURRICULUM

ECTS Subject code (F)pT P No

- **p**- additional symbol for the Plovdiv branch where the specialty is taught;
- **T** – type of course: **B** for BEng, **M** for MEng;
- **P** – a part of: **EE** – “Electrical Engineering”;
- **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.	Class-room work	Self study	Total	E	CA	SP	SA		

SEMESTER I

0	Introduction to the specialty	(1)	0	0	(1)	(1)	(2)					FpBEE00	0
1	Mathematics I	3	3	0	6	8	14	1				FpBEE01	8
2	Physics I	2	1	1	4	7	11	1				FpBEE02	7
3	Chemistry	1	0	1	2	5	7	1				FpBEE03	4
4	Programming and use of computers I	2	0	2	4	6	10		1			FpBEE04	6
5	Fundamentals of engineering design I	1	0	2	3	5	8		1*		1	FpBEE05	5
6	Foreign language I	0	(2)	0	(2)	(4)	(6)		1*			FpBEE06	0
7	Sports I	0	(3)	0	(3)	(0)	(3)					FpBEE07	0
TOTAL		9	4	6	19	31	50	3	2	0	1		30

SEMESTER II

8	Mathematics II	3	2	0	5	6	11	1				FpBEE08	6
9	Physics II	2	0	1	3	5	8	1				FpBEE09	5
10	Material science	2	0	1	3	4	7	1				FpBEE10	4
11	Mechanics	2	2	0	4	6	10	1				FpBEE11	6
12	Programming and use of computers II	2	0	1	3	4	7		1		1	FpBEE12	5
13	Fundamentals of engineering design II	1	0	1	2	3	5		1*			FpBEE13	3
14	Introduction to industrial technologies	0	1	(2)	1	1	2					FpBEE14	1
15	Foreign language II	0	(2)	0	(2)	(4)	(6)		1*			FpBEE15	0
16	Sports II	0	(3)	0	(3)	0	(3)					FpBEE16	0
TOTAL		12	5	4	21	29	50	4	2	0	1		30

*- one continuous assessment mark assigned in parts in two semesters for a two-semester subject

No	Subject	Week load						Assessment				ECTS subject code	ECTS credits
		L	Tut	Lab.	Class-room work	Self study	Total	E	CA	SP	SA		

SEMESTER III

17	Mathematics III	2	2	0	4	7	11	1				FpBEE17	7
18	Theoretical electrical engineering I	2	2	1	5	7	12	1			1	FpBEE18	7
19	Technical safety	2	0	1	3	4	7	1				FpBEE19	4
20	Semiconductor electronics	3	0	2	5	7	12	1				FpBEE20	7
21	Economics	2	1	0	3	5	8		1			FpBEE21	5
22	Foreign language III	0	(2)	0	(2)	(4)	(6)		1			FpBEE22	0
23	Sports III	0	(3)	0	(3)	0	(3)					FpBEE23	0
TOTAL		11	5	4	20	30	50	4	2	0	1		30

SEMESTER IV

24	Theoretical electrical engineering II	2	2	2	6	6	12	1				BpEE24	7
25	Electrical measurements	2	0	2	4	6	10	1				BpEE25	6
26	Machine elements and mechanisms	2	0	1	3	6	9	1			1	BpEE26	5
27	Digital and microprocessor engineering	2	1	1	4	6	10		1		1	BpEE27	6
28	Electrical materials	2	0	2	4	5	9	1				BpEE28	6
29	Sports IV	0	(4)	0	0	0	(4)					BpEE29	0
TOTAL		10	3	8	21	29	50	4	1	0	2		30

SEMESTER V

30	Electrical machines I	3	2	2	7	7	14	1			1	BpEE30	8
31	Electrical apparatus I	3	1	2	6	6	12	1			1	BpEE31	7
32	High voltage engineering	2	0	2	4	4	8	1				BpEE32	5
33	Telecommunications	2	0	1	3	3	6		1			BpEE33	4
34	Lighting and installation engineering	2	0	1	3	3	6	1				BpEE34	4
35	Energy engineering	2	0	0	2	2	4		1			BpEE35	2
TOTAL		14	3	8	25	25	50	4	2	0	2		30

No	Subject	Week load						Assessment				ECTS subject code	ECTS credits
		L	Tut	Lab.	Class-room work	Self study	Total	E	CA	SP	SA		

SEMESTER VI

36	Electrical machines II	3	2	2	7	7	14	1			1*	BpEE36	8
37	Electrical apparatus II	3	1	2	6	6	12	1			1*	BpEE37	7
38	Converters engineering	2	0	2	4	4	8	1				BpEE38	5
39	Design of electrical machines	3	0	2	5	5	10	1		1		BpEE39	6
40	Management	2	1	0	3	3	6		1			BpEE40	4
TOTAL		13	4	8	25	25	50	4	1	1	1		30

SEMESTER VII

41	Electrical drives	3	0	2	5	6	11	1				BpEE41	7
42	Electrical power engineering	3	2	0	5	5	10	1			1	BpEE42	6
43	Switchgear and controlgear	3	0	2	5	5	10	1		1		BpEE43	6
44	Technologies in electrical engineering and electronics	3	0	2	5	5	10	1				BpEE44	6
45	Ecology and renewable energy sources	2	0	2	4	5	9		1			BpEE45	5
TOTAL		14	2	8	24	26	50	4	1	1	1		30

SEMESTER VIII – 10 weeks

46	Optional subject* (from List 1)	2	0	2	4	5	9	1				BpEE46	4
47	Optional subject* (from List 2)	2	0	2	4	5	9	1				BpEE47	4
48	Optional subject* (from List 3)	2	0	2	4	4	8		1	1		BpEE48	3
49	Optional subject* (from List 4)	2	0	2	4	4	8		1			BpEE49	3
50	Optional subject* (from List 5)	2	0	2	4	4	8		1			BpEE50	3
51	Optional subject* (from List 6)	2	0	2	4	4	8		1		1	BpEE51	3
52	Diploma project -7weeks	Diploma project defense										BpEE52	10
TOTAL		12	0	12	24	26	50	2	4	1	1		30

LISTS OF OPTIONAL SUBJECTS

List 1		
1	Marketing	pBEE46.1
2	Management of a small company	pBEE46.2
3	Industrial management	pBEE46.3

List 2		
1	Automation	pBEE47.1
2	Electronics	pBEE47.2

List 3		
1	Electrical grids and systems	pBEE48.1
2	Electric power supply of industrial enterprises	pBEE48.2
3	Non-conventional sources of energy	pBEE48.3

List 4		
1	CAD systems in electrical engineering	pBEE49.1
2	Systems with guaranteed and uninterrupted power supply	pBEE49.2

List 5		
1	Electronic measuring instruments and primary converters	pBEE50.1
2	Quality control	pBEE50.2

List 6		
1	Electromagnetic compatibility	pBEE51.1
2	Electrotechnologies	pBEE51.2