

CURRICULUM

Bachelor's degree program in Electronics

as of 2021/2022 academic year

ECTS Subject code T E 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 the Plovdiv branch where the specialty is taught; E – “Electronics”													
- 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	MAT11	Mathematics I	45	30	0	75	165	240	1				8
2	PHY02	Physics	30	30	15	75	165	240	1				8
3	CHE02	Chemistry	15	0	30	45	105	150	1				5
4	ENG06	Engineering graphics	15	0	45	60	120	180		1		1	6
5	LNG01	Foreign language I	0	30	0	30	30	60		1			2
6	SPR01	Sport	0	0	0	0	30	30		1			1
Total			105	90	90	285	615	900	3	3	0	1	30
SEMESTER II													
7	MAT21	Mathematics II	45	30	0	75	135	210	1				7
8	EEA01	Electrical materials	30	0	30	60	90	150	1				5
9	CCE26	Programming 1	30	0	30	60	90	150		1		1	5
10	MEC22	Mechanics	30	30	0	60	90	150	1				5
11	EEA02	Technical safety	30	0	15	45	105	150		1			5
12	PRC01	Practicum	0	0	0	0	60	60		1			2
13	SPR02	Sport	0	0	0	0	30	30		1			1
Total			165	60	75	300	600	900	3	4	0	1	30
SEMESTER III													
14	EEA03	Theory of Electrical Engineering I	30	30	15	75	165	240	1			1	8
15	EEA04	Electrical measurements	30	0	30	60	120	180	1				6
16	MEC23	Mechanical systems	30	0	15	45	105	150		1			5
17	EEA05	Semiconductor Devices	30	0	30	60	90	150	1				5
18	EEA06	Electronic circuits theory	30	0	30	60	90	150		1			5
19	SPR03	Sport	0	0	0	0	30	30		1			1
Total			150	30	120	300	600	900	3	3	0	1	30
SEMESTER IV													
20	EEA11	Analog electronics	30	0	30	60	120	180	1			1	6
21	CCE29	Programming 2	30	0	30	60	120	180		1		1	6
22	EEA12	Electromechanical Systems	30	0	30	60	60	120		1			4
23	EEA09	Digital Electronics	30	0	30	60	90	150	1				5
24	CCE30	Signals and Systems	30	0	30	60	60	120	1				4
25	EEA10	Digital Electronics - Semester Project	0	0	0	0	60	60			1		2
26	PRC02	Practicum	0	0	0	0	60	60		1			2
27	SPR04	Sport	0	0	0	0	30	30		1			1
Total			150	0	150	300	600	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	BpE01	Power Supplies	30	15	20	65	115	180	1				6
29	BpE02	Circuitry for impulse and mixed signals	30	10	20	60	90	150		1			5
30	BpE03	Programming 3	30	30	0	60	90	150	1			1	5
31	BpE04	Quality and Reliability in Electronics	30	15	10	55	95	150		1			5
32	BpE05	Electronic measurement systems	30	0	30	60	90	150	1				5
33	BpE06	Practicum	0	0	0	0	60	60		1			2
34	BpE07	Power Supplies - Semester Project	0	0	0	0	60	60			1		2
Total			150	70	80	300	600	900	3	3	1	1	30
SEMESTER VI													
35	BpE08	Microprocessor techniques	30	15	30	75	105	180	1				6
36	BpE09	Microelectronics	30	0	20	50	100	150	1				5
37	BpE10	Electronic regulators	30	15	20	65	115	180	1			1	6
38	BpE11	Computer aided design in electronics	30	15	20	65	85	150		1		1	5
39	BpE12	Management and Marketing	30	15	0	45	75	120		1			4
40	BpE13	Practicum	0	0	0	0	60	60		1			2
41	BpE14	Microprocessor techniques – Semester Project	0	0	0	0	60	60			1		2
Total			150	60	90	300	600	900	3	3	1	2	30
SEMESTER VII													
42	BpE15	Systems with Artificial intelligence	30	0	20	50	100	150		1		1	5
43	BpE16	Elective technical course 1 (List 1 or List 2)	30	0	20	50	100	150	1				5
44	BpE17	Elective technical course 2 (List 1 or List 2)	30	15	20	65	85	150	1				5
45	BpE18	Elective technical course 3 (List 1 or List 2)	30	0	20	50	100	150	1				5
46	BpE19	Elective technical course 4 (List 1 or List 2)	30	0	20	50	70	120		1			4
47	BpE20	Elective technical course 5 (List 1 or List 2)	30	0	20	50	70	120		1			4
48	BpE21	Elective semester project from courses BpE16, BpE17 and BpE18	0	0	0	0	60	60			1		2
Total			180	15	120	315	585	900	3	3	1	1	30
SEMESTER VIII													
49	BpE22	Elective technical course 1 (List 3 or List 4)	30	0	20	50	100	150	1			1	5
50	BpE23	Elective technical course 2 (List 3 or List 4)	30	0	20	50	100	150		1			5
51	BpE24	Elective technical course 3 (List 3 or List 4)	30	0	20	50	100	150	1				5
52	BpE25	Elective technical course 4 (List 3 or List 4)	30	0	20	50	100	150		1			5
53	BpE26	Diploma project	0	0	0	0	300	300	Defense of diploma thesis			10	
Total			120	0	80	200	700	900	2	2	0	1	30

*Remark: The method of Assessment (Continuous Assessment) for the subjects "Sport" and "Practicum" is "Pass grade"/"No Pass grade".

LIST OF THE OPTIONAL SUBJECTS

List 1		Code
1	Data acquisition systems – methods and techniques	BpE16.1
2	Electronic converters	BpE17.1
3	Medical electronics	BpE18.1
4	Fundamentals of programmable logic controllers	BpE19.1
5	Sensors and sensor devices	BpE20.1

List 2		Code
1	Real-time control systems	BpE16.2
2	Power electronics converters	BpE17.2
3	Biomedical engineering	BpE18.2
4	Automation of electronic production	BpE19.2
5	Sensors and actuators	BpE20.2

List 3		Code
1	Analysis, modelling and design of power converters	BpE22.1
2	Information systems with laser radiation	BpE23.1
3	Fundamentals of network technologies	BpE24.1
4	Electronic technological devices	BpE25.1

List 4		Code
1	Computer aided design of power electronic circuits	BpE22.2
2	Optical communication systems	BpE23.2
3	Industrial computer networks	BpE24.2
4	Electronic devices for measuring non-electrical quantities	BpE25.2

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	FaLNG02	Foreign Language II	0	30	0	30	30	60		1			2
SEMESTER V													
1	FaSPR05	Sport	0	0	0	0	30	30		1			1
SEMESTER VI													
1	FaSPR06	Sport	0	0	0	0	30	30		1			1
2	FaBpE01	Project Management (in English)	15	0	30	45	45	90		1			3
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