



CURRICULUM

Professional orientation: **Energetics**
 Program: **Electrical Power Engineering**
 Professional qualification: **Electrical Engineer**
 Educational and qualifical degree: **Bachelor**
 Form of study: **Full - Time**
 Term of study: **4 years / 8 semesters**

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mathematics, part 1	1				15	45			60	120	180	7
2	Physics	1				30	15	15		60	120	180	7
3	Technical Mechanics	1				15	30			45	120	165	6
4	Electrotechnical Documentation		1			15		30		45	120	165	6
5	English, part 1				1		30			30	30	60	2
6	Practical Training, part 1				1						30	30	1
7	Elective Subject				1						30	30	1
7a	Specialized Sport Activities, part 1				1						30	30	1
7b	Sport and Social Adaptation, part 1				1						30	30	1
Total for the 1 semester:		3	1		3	75	120	45		240	570	810	30
8	Mathematics, part 2	2				30	30			60	105	165	6
9	Theoretical Electrical Engineering, part 1	2				30		30		60	105	165	6
10	Programming and Computer Technologies in Electric Power Engineering		2			15		30		45	60	105	4
11	Thermal Part of Thermal Power Plants		2			30				30	105	135	5
12	Hydro-power Equipment				2	15		15		30	75	105	4
13	Materials in Electrical Engineering	2				30		30		60	105	165	6
14	English, part 2				2		30			30	30	60	2
15	Practical Training, part 2				2						30	30	1
16	Elective Subject				2						30	30	1
16a	Specialized Sport Activities, part 2				2						30	30	1
16b	Sport and Social Adaptation, part 2				2						30	30	1
Total for the 2 semester:		3	2		4	150	60	105		315	645	960	35
17	Theoretical Electrical Engineering, part 2	3				30		30		60	120	180	7
18	Electrical Measurements	3				30		30		60	105	165	6
19	Power Electronics	3				30		15		45	90	135	5
20	Technology of Electric Power Generation		3			30	15			45	90	135	5
21	Electrical Machines and Apparatus, part 1	3				30		30		60	105	165	6
22	English, part 3		3				30			30	30	60	2

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		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
23	Practical Training, part 3				3						30	30	1
24	Elective Subject				3						30	30	1
24a	Specialized Sport Activities, part 3				3						30	30	1
24b	Sports Management, part 1				3						30	30	1
Total for the 3 semester:		4	2		2	150	45	105		300	600	900	33
25	Installation and Lighting Equipment		4			30	15	15		60	105	165	6
26	Digital and Microprocessor Technics		4			30		15		45	90	135	5
27	Electrical Machines and Apparatus, part 2	4				30		30		60	105	165	6
28	Electric Power System Modelling	4				30	15	15		60	105	165	6
29	Mechanical Part of Electric Power Networks	4				30	30			60	105	165	6
30	Practical Training, part 4				4						30	30	1
31	Elective Subject				4						30	30	1
31a	Specialized Sport Activities, part 4				4						30	30	1
31b	Sports Management, part 2				4						30	30	1
Total for the 4 semester:		3	2		2	150	60	75		285	570	855	31
32	Power System Economics		5			30	15			45	90	135	5
33	Electric Power Networks and Systems	5				30	30			60	105	165	6
34	Mechanical Part of Electric Power Networks, project			5					30	30	30	60	2
35	Short Circuits in Electric Power Systems	5				30	15		15	60	120	180	7
36	Technical Safety	5				30	15	15		60	105	165	6
37	Electrical Part of Power Plants and Substations	5				30		30		60	105	165	6
Total for the 5 semester:		4	1	1		150	75	45	45	315	555	870	32
38	Electric Power Networks and Systems, project			6					30	30	30	60	2
39	Urban Electric Power Networks	6				30	30			60	105	165	6
40	Remote Control in Electric Power Systems	6				30		30		60	105	165	6
41	Electrical Part of Power Plants and Substations, project			6					30	30	30	60	2
42	Relay Protection	6				30		30		60	105	165	6
43	Elective Subject		6			30	15			45	90	135	5
43a	Grounding and Lightning Protection Installations		6			30	15			45	90	135	5
43b	Control and Planning of Electric Power System Operation		6			30	15			45	90	135	5
44	Special Practice				6						90	90	3
Total for the 6 semester:		3	1	2	1	120	45	60	60	285	555	840	30
45	Electric Power Systems Stability	7				30	15	15		60	120	180	7
46	High Voltage Engineering	7				30		30		60	105	165	6
47	Electric Power System Construction	7				30		30		60	105	165	6
48	Remote Control in Electric Power Systems, project			7					30	30	30	60	2
49	Electric Power Systems Automation	7				30		30		60	105	165	6
50	Elective Subject		7			30		15		45	90	135	5
50a	Auxiliary Power Supply of Power Plants		7			30		15		45	90	135	5
50b	Electric Insulation System Testing		7			30		15		45	90	135	5
Total for the 7 semester:		4	1	1		150	15	120	30	315	555	870	32
51	Computer-aided Studies of Electric Power Systems	8				30		15	15	60	120	180	7
52	Design and Operation of Power System Relay Protection and Automation	8				30	15	15		60	120	180	7
53	Design and Operation of Power System Relay Protection and Automation, project			8					30	30	30	60	2

No	Subject Name	Types of term control				Semester auditorium load					Unsuper vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
54	Elective Subject	8				30		15		45	90	135	5
54a	Operation of Electric Power Plants and Networks	8				30		15		45	90	135	5
54b	Coordination and Diagnostics of Electrical Insulating Systems	8				30		15		45	90	135	5
Total for the 8 semester:		3		1		90	15	45	45	195	360	555	21
Total for all courses of education:		27	10	5	12	1035	435	600	180	2250	4410	6660	244

Facultative subjects

No	Subject Name	Types of term control				Semester auditorium load incl:					Unsuper-vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis / Preparation for State Examination	8	300	10
Defence of Diploma Thesis / State Examination	8		

Accepted from AU with

Protocol No 10 / 25.04.2016

Modified with Protocols No 11 / 06.06.2016, No 22 / 26.06.2017, No 42 / 27.05.2019

Valid from the 2016 / 2017 academic year.

The weekly allocation of the classes is fixed according to the "Structure of the Learning Process" Academic Board adopted for the current academic year.

Head of Department EPE:

/ Assoc. Prof. PhD Kamenov Y. /

Dean of Faculty FEE:

/ Assoc. Prof. PhD Yordanova M. /