

TODOR KABLESHKOV UNIVERSITY OF TRANSPORT

FACULTY OF TELECOMMUNICATIONS AND ELECTRICAL EQUIPMENT IN TRANSPORT

Programme: **Power Engineering and Electrical Equipment**

Degree: **Bachelor**

Professional Qualification: **Electrical Engineer**

Mode of Study: **Full-time**

Duration of Study: **Four years**

№	Code	Subject	Duration	Contact Hours	ECTS Credits
1	2	3	4	5	6
		Compulsory			
1	811	Mathematics I	1S	75	7
2	1114	Physics	1S	90	7
3	821	Informatics	1S	90	7
4	721	Political Science	1S	45	3
5	914	Applied Mechanics	1S	75	6
6	812	Mathematics II	1S	75	7
7	1210	Chemistry	1S	45	4
8	715	Foreign Language	1S	90	6
9	702	Economics	1S	60	4
10	1101	Theoretical Electrical Engineering I	1S	105	9
11	815	Mathematics III	1S	60	6
12	1102	Theoretical Electrical Engineering II	1S	60	6
13	1006	Fundamentals of Machine Design	1S	90	6
14	1104	Electrical Measurements	1S	75	6
15	1308	Electrical Power Supply	1S	90	6
16	1301	Safety and Ecology	1S	45	3
17	1302	High Voltage Equipment	1S	105	8
18	1309	Power Electronics	1S	75	6
19	246	Heat Transfer and Thermal Energy Equipment	1S	45	3
20	1305	Electrical Power Networks and Systems	1S	105	7
21	1373	Project in Electrical Power Networks and Systems	1S		3
22	1303	Electrical Machines	1S	90	6
23	1304	Electrical Apparatuses	1S	90	7
24	1372	Power Systems Modes	1S	90	7
25	1310	Propulsion and Power Calculations	1S	60	4
26	1443	Management of Transport Power Systems	1S	45	3
27	1368	Electrical Machines Project	1S		3
28	1329	Relay Protection	1S	60	5
29	1306	Electrical Equipment in Power Plants	1S	90	6
30	1307	Electrical Equipment	1S	90	6
31	1344	Automatic Control Systems	1S	75	6
32	1349	Testing of Electric Transport Equipment	1S	60	4
33	1369	Electrical Equipment Project	1S		3
34	1328	Electric Drive	1S	90	10
35	1330	Power Supply and Electrical Equipment Design	1S	45	6
36	1374	Project in Power Supply and Electrical Equipment Design	1S		4
37	1331	Contemporary Trends in Development of Electric Transport	1S	60	10
38	1325	Current Collection for Electric Drive Vehicles	1S	60	10
39	719	Physical Education and Sports	4S	120	
		Elective			
40.1	1333	Stationary Electrical Equipment	1S	90	10
40.2	1356	Electric Transport	1S	90	10
41.1	1334	Control and Protection of Stationary Electrical Equipment	1S	105	10
41.2	1357	Control and Protection of Electric Drive Vehicles	1S	105	10

		Optional			
42.1	1335	Railway Transport Regulations	1S	60	6
42.2	141	Railways Technical Operation and Traffic Safety	1S	60	6
42.3	1336	Technical Operation and Traffic Safety of Urban Electric Transport	1S	60	6
43.1	1337	Structure and Control Systems of Stationary Electrical Equipment	1S	90	6
43.2	1338	Structure and Control Systems of Electric Locomotives	1S	90	6
43.3	1339	Structure and Control Systems of Urban Transport Electric Vehicles	1S	90	6
44.1	1352	Maintenance and Repair of Stationary Electrical Equipment	1S	75	5
44.2	223	Train Brakes	1S	75	5
44.3	1353	Break Systems of Urban Transport Electric Vehicles	1S	75	5
45.1	1354	Operation of Stationary Electrical Equipment	1S	75	5
45.2	1345	Operation of Electric Locomotives	1S	75	5
45.3	1355	Operation of Urban Transport Electric Vehicles	1S	75	5
		Practical Training			
46		Practical Training in Material Processing	2W	60	2
47		Internship in Transport Company	2W	60	2
48		Internship in Energy Maintenance Company	2W	60	2
		State Examination			10

S - Semester

W - Week