

"Todor Kableshkov" University of Transport

Faculty: Telecommunications and Electrical Equipment in Transport

Programme: Metropolitan and Urban Ground Electric Transport

Degree: Bachelor

Mode of study: Full time

Duration of study: 4.0 years

No	Code	Course	Total contact hours (Hours of lectures and seminars)	ECTS credits
<i>Compulsory courses</i>				
1	811	Mathematics part I	75	7
2	1114	Physics	90	7
3	821	Informatics	90	7
4	703	Economic History	45	3
5	702	Economics	45	4
7	812	Mathematics part II	75	7
8	1210	Chemistry	45	3
9	715	Foreign Language - English, German, French, Russian	90	6
10	914	Applied Mechanics	75	6
11	1101	Theoretical Electrical Engineering part I	90	8
12	815	Mathematics part III	60	6
13	1102	Theoretical Electrical Engineering part II	60	6
14	1006	Fundamentals of Machine Design and Construction	90	6
15	1110	Electrical and Electronic Measurements	75	5
16	1302	High Voltage Technique	90	7
17	13165	Technical and Fire Safety	45	3
18	1309	Power Electronics	75	6
19	696	Hydraulic and Pneumatic Systems in Electric Transport	45	3
20	1305	Electrical Power Networks and Systems	90	7
21	1373	Electrical Power Networks and Systems - Course Project	0	3
22	1303	Electrical Machines	90	7
24	1383	Electrical Power Supply of the Electric Transport	75	6
25	1382	Electrical Apparatuses and Transducers	90	7
26	1381	Vehicles for Public Transport	60	6
27	1310	Traction and Energy Calculation	60	4
28	346	Transport Infrastructure	45	4
29	551	Communication and Security Equipment of Public Electric Transport and Subway	45	3
30	1384	Motor Drives for Electric Vehicles	60	6
31	193	Technology and Organization of Urban Electric Transport and Subway	45	3
32	1390	Electrical Equipment of Electrical Transport	75	6
33	1344	Systems for Automatic Control	75	5
34	13100	Design of Power Supply Facilities and Electrical Equipment in the Electric Transport	45	5
35	13170	Motor Drives for Electric Vehicles - make a project	0	3
37	13101	Technical Tools for Protection of Power Supply Facilities and Electric Vehicles	75	7

38	13102	Design of Power Supply Facilities and Electrical Equipment in the Electric Transport - make a project	0	3
39	13103	Diagnostics and Testing of Electrical Equipment in Urban Electric Transport and Subway	60	6
40	719	Physical Education and Sports	0	0
	1224	Locksmith	0	0
	1223	Thermal Treatment	0	0
	1222	Welding	0	0
	1221	Casting	0	0
	721	Political Science	45	4
	1225	Turnery	0	0
<i>Elective courses</i>				
41.1	263	Mechanical Part of Metropolitan Rolling Stock	60	6
41.2	267	Mechanical Part of City Electric Vehicles	60	6
42.1	13104	Electric circuits, control systems and protection of subway trains	90	8
42.2	13105	Electric Circuits, Control Systems and Protection of Public Electric Transport Vehicles	90	8
43.1	13109	Structure, Management and Protection of Electric Power Stations in the Subway	75	8
43.2	13110	Structure, Management and Protection of Electric Power Systems in the Urban Transport	75	8
44.1	13111	Ongoing Maintenance and Repair of Rolling Stock and Electric Power Facilities of Subway	75	7
44.2	13112	Ongoing Maintenance and Repair of Electric Vehicles and Electric Power Facilities of Urban Electric Transport	75	7
45.1	13113	Maintaining and Repairing Electric Power Equipments - practicum	60	5
45.2	13114	Maintenance and Repair of Electrical Vehicles - practicum	60	5
<i>Optional courses</i>				
46.1	194	Technical Operation and Traffic Safety in Subway Areas	60	7
46.2	13106	Technical Operation of Cable Lines and Power Supply Stations of Subway	60	7
46.3	13107	Technical Operation of Trolleybuses and Electric Buses	60	7
46.4	13108	Technical Operation of Power Supply and Cable Networks of Public Electric Transport	60	7
47.1	217	Braking Systems of Rolling Stock of Metropolitan	75	6
47.2	13115	Technical Operation of Traction-lowering Stations of Subway	75	6
47.3	13116	Technical Exploitation of Tram Wagons	75	6
47.4	13117	Technical Operation of Rectifier Stations of Public Transport	75	6
48.1	1378	Maintenance of Subway Trains	75	7
48.2	13119	Safety and health when operating the power supply equipment of the metropolitan	75	7
48.3	13120	Occupational Safety and Health at Work the electrical equipment of urban electric transport vehicles	75	7
48.4	13121	Occupational Safety and Health at Work on power supplies of urban ground electric transport	75	7