

TODOR KABLESHKOV UNIVERSITY OF TRANSPORT

FACULTY OF MACHINERY AND CONSTRUCTION TECHNOLOGIES IN TRANSPORT

Programme: **Railway Engineering**

Degree: **Bachelor**

Professional Qualification: **Mechanical 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	1207	Chemistry	1S	45	4
3	715	Foreign Language	1S	90	6
4	702	Economics	1S	60	4
5	1201	Material Science and Technology	1S	105	9
6	812	Mathematics II	1S	75	7
7	1114	Physics	1S	90	7
8	821	Informatics	1S	90	7
9	1011	Applied Geometry and Engineering Drawing I	1S	45	3
10	906	Theoretical Mechanics I	1S	60	6
11	813	Mathematics III	1S	60	6
12	907	Theoretical Mechanics II	1S	60	6
13	1012	Applied Geometry and Engineering Drawing II	1S	45	3
14	902	Strength of Materials	1S	105	7
15	278	Heat Transfer Equipment	1S	60	5
16	1002	Computer Drawing for Engineers	1S	45	3
17	903	Theory of Mechanisms and Machines	1S	60	5
18	1116	Electrical Engineering and Electronics	1S	90	6
19	1013	Metrology and Measurement Equipment	1S	60	4
20	908	Fluid Mechanics	1S	60	5
21	1008	Machine Elements	1S	105	8
22	1009	Machine Elements Project	1S		2
23	1341	Electrical Machines, Apparatuses and Drive	1S	60	5
24	1205	Mechanical Engineering Technologies	1S	75	5
25	207	Internal Combustion Engines	1S	105	8
26	690	Hydraulic and Pneumatic Drives and Equipment	1S	60	5
27	1360	Electrical Railway Equipment	1S	75	5
28	208	Project in Internal Combustion Engines	1S		2
29	222	Train Traction	1S	45	4
30	201	Technical Safety and Ecology	1S	60	4
31	279	Reliability of Vehicles	1S	60	5
32	703	Economic History	1S	45	3
33	280	Railway Wagons	1S	105	8
34	190	Road Transport Technology and Organization	1S	60	6
35	346	Transport Infrastructure	1S	45	5
36	262	Project in Railway Wagons	1S		4
37	245	Locomotives	1S	105	11
38	281	Test and Diagnosis of Railway Equipment	1S	75	10
39	282	Railway Equipment Repair	1S	90	10
40	254	Project in Locomotives	1S		4
41	719	Physical Education and Sports	4S	120	
		Elective			
42.1	692	Material Handling Equipment	1S	75	8
42.2	283	Automotive Engineering	1S	75	8

43.1	284	Brake Systems in Railway Vehicles	1S	60	8
43.2	285	Systems for Microclimate Maintenance in Railway Equipment	1S	60	8
		Optional			
44	141	Railways Technical Operation and Traffic Safety	1S	60	4
45.1	261	Control Systems of Diesel Locomotives	1S	90	6
45.2	1338	Control Systems of Electric Locomotives	1S	90	6
45.3	286	Structure, Systems and Technical Control of Railway Wagons	1S	90	6
46	223	Train Brakes	1S	75	5
47.1	232	Diesel Locomotives Operation	1S	75	5
47.2	1345	Operation of Electric Locomotives	1S	75	5
47.3	236	Railway Wagon Operation	1S	75	5
		Practical Training			
48		Practice in Material Processing	2W	60	2
49		Internship in Transport Company	2W	60	2
50		Internship in Mechanical Engineering Company	2W	60	2
		State Examination			10

S - Semester
W - Week