

"Todor Kableshkov" University of Transport

Faculty: Machinery and Construction Technologies in Transport

Programme: Railway Engineering

Degree: Bachelor

Mode of study: Part 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	38	7
2	1207	Chemistry	23	4
3	715	Foreign Language - English, German, French, Russian	45	6
4	702	Economics	30	4
5	1201	Material Science and Technology	45	8
6	812	Mathematics part II	38	7
7	1114	Physics	45	7
8	821	Informatics	45	6
9	1011	Applied Geometry and Engineering Drawing I	23	3
10	906	Theoretical Mechanics part I	30	6
11	813	Mathematics part III	30	6
12	907	Theoretical Mechanics part II	30	6
13	1012	Applied Geometry and Engineering Drawing II	23	3
14	902	Strength of Materials	53	7
15	278	Heat Transfer Equipment	30	5
16	1002	Computer Drawing for Engineers	23	3
17	903	Theory of Mechanisms and Machines	30	5
18	1116	Electrical Engineering and Electronics	45	6
19	1013	Metrology and Measurement Equipment	30	4
20	908	Fluid Mechanics	30	5
21	1008	Machine Elements	53	8
22	1009	Machine Elements - make a project	0	2
23	1341	Electrical Machines, Apparatuses and Drive	23	4
24	1205	Mechanical Engineering Technologies	38	5
25	600	Internal Combustion Engines	53	8
26	690	Hydraulic and Pneumatic Drives and Equipment	30	5
27	1360	Electrical Railway Equipment	38	5
28	699	Internal Combustion Engines - make a project	0	2
29	222	Train Traction	23	4
30	201	Technical Safety and Ecology	23	4
31	279	Reliability of Vehicles	30	5
32	703	Economic History	23	3
33	280	Railway Wagons	53	7
34	346	Transport Infrastructure	23	5
35	262	Railway Wagons - make a project	0	4
36	245	Locomotives	53	11
37	281	Railway Equipment Testing and Diagnostics	38	10
38	282	Railway Equipment Repair	38	5

39	254	Locomotives - make a project	0	4
40	190	Rail Transport Technology and Organization	30	6
	1222	Welding	3	0
	1225	Turnery	3	0
	1224	Locksmith	3	0
	1223	Thermal Treatment	3	0
	1221	Casting	3	0
<i>Elective courses</i>				
41.1	692	Material Handling Equipment	30	4
41.2	283	Automotive Engineering	30	4
42.1	284	Brake Systems in Railway Vehicles	30	5
42.2	285	Systems for Microclimate Maintenance in Railway Equipment	30	5
<i>Optional courses</i>				
43	141	Railways Technical Operation and Traffic Safety	30	4
44.1	261	Control Systems for Diesel Locomotives	45	6
44.2	1338	Control Systems of Electric Locomotives	45	6
44.3	286	Structure, Systems and Technical Control of Railway Wagons	45	6
45	223	Train Brakes	38	5
46.1	232	Diesel Locomotives Operation	38	5
46.2	1345	Operation of Electric Locomotives	38	5
46.3	236	Railway Wagon Operation	38	5