

"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	872	Mathematics	38	7
2	1207	Chemistry	23	6
3	715	Foreign Language - English, German, French, Russian	38	6
4	702	Economics	23	5
5	1201	Material Science and Technology	30	6
6	882	Applied Mathematics	38	7
7	1125	Physics	23	6
8	821	Informatics	30	6
9	906	Theoretical Mechanics part I	30	6
10	1011	Applied Geometry and Engineering Drawing I	23	5
11	1012	Applied Geometry and Engineering Drawing II	23	5
12	907	Theoretical Mechanics part II	30	5
13	902	Strength of Materials	38	5
14	278	Heat Transfer Equipment	23	5
15	1002	Computer Drawing for Engineers	23	5
16	1224	Locksmith	3	1
16	1225	Turnery	3	1
16	1222	Welding	3	1
16	1221	Casting	3	1
16	1223	Thermal Treatment	3	1
17	903	Theory of Mechanisms and Machines	30	5
18	1116	Electrical Engineering and Electronics	30	6
19	1013	Metrology and Measurement Equipment	23	4
20	908	Fluid Mechanics	23	5
21	1008	Machine Elements	38	8
22	1009	Machine Elements - make a project	0	2
23	1205	Mechanical Engineering Technologies	23	5
24	600	Internal Combustion Engines	38	8
25	699	Internal Combustion Engines - make a project	0	2
26	690	Hydraulic and Pneumatic Drives and Equipment	23	5
27	1341	Electrical Machines, Apparatuses and Drive	23	5
28	1360	Electrical Railway Equipment	23	5
29	201	Technical Safety and Ecology	23	5
30	284	Brake Systems in Railway Vehicles	30	5
31	190	Rail Transport Technology and Organization	30	5
32	279	Reliability of Vehicles	23	4
33	202	Rolling stock	38	6
34	703	Economic History	23	4

35	346	Transport Infrastructure	23	5
36	222	Train Traction	23	4
37	281	Railway Equipment Testing and Diagnostics	30	4
38	282	Railway Equipment Repair	30	5
45.1	739	Specialized English language course	23	3
<i>Elective courses</i>				
40.1	280	Railway Wagons	38	11
40.2	245	Locomotives	38	11
41.1	262	Railway Wagons - make a project	0	4
41.2	254	Locomotives - make a project	0	4
42.1	2208	Electronic systems in railway engineering	30	6
42.2	285	Systems for Microclimate Maintenance in Railway Equipment	30	6
43.1	692	Material Handling Equipment	23	4
43.2	283	Automotive Engineering	23	4
44.1	269	Alternative railway drives technique	23	4
44.2	299	High speed trains and unconventional railways	23	4
45.2	738	Specialized German language course	23	3
45.3	740	Specialized course in Russian	23	3
<i>Optional courses</i>				
46.1	261	Control Systems for Diesel Locomotives	38	6
46.2	1338	Structure and Control Systems of Electric Locomotives	38	6
46.3	286	Structure, Systems and Technical Control of Railway Wagons	38	6
47	141	Technical Operation and Traffic Safety in Railway Transport	30	4
48.1	232	Diesel Locomotives Operation	38	5
48.2	1345	Operation of Electric Locomotives	38	5
48.3	236	Railway Wagon Operation	38	5
49	223	Train Brakes	30	5