

"Todor Kableshkov" University of Transport

Faculty: Telecommunications and Electrical Equipment in Transport

Programme: Telecommunications and Signalling

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	871	Mathematics	38	7
2	1114	Physics	38	7
3	821	Informatics	30	7
4	703	Economic History	23	4
5	702	Economics	23	4
6	881	Applied Mathematics	38	8
7	715	Foreign Language - English, German, French, Russian	38	7
8	508	Automatics and Telemechanics Theory	38	7
9	1101	Theoretical Electrical Engineering part I	38	8
10	1102	Theoretical Electrical Engineering part II	38	8
11	1110	Electrical and Electronic Measurements	38	8
12	1006	Fundamentals of Machine Design and Construction	38	7
13	501	Semiconductor Elements	31	7
14	552	Computer Systems and Architectures	38	8
15	553	Signals and Systems	31	7
16	507	Power Supply Equipment	30	7
17	503	Analogue and Digital Systems	23	4
18	502	Digital and Microprocessor Systems	38	7
19	556	Information-Managing Systems and Processes	31	6
20	597	Basics of insurance technology	31	7
21	514	Reliability and Safety Theory	23	4
22	534	Optic Technologies and Networks	31	6
23	512	Radio Communications	38	7
24	558	Computer Communications and Networks	23	5
25	560	Rolling Stock Positioning and Management	23	3
26	516	Automatic Traffic Control	38	7
27	517	Automatic Traffic Control - make a project	0	3
28	518	Design and Technology of Telecommunications and Signalling	38	6
29	520	Interlocking and Signalling Systems	38	7
30	521	Interlocking and Signalling Systems - make a project	0	3
31	523	Computer-aided Modelling and Simulation	23	4
32	522	Remote Control Systems and Management in Transport	38	6
33	564	Measurement, Control and Diagnostics of Computer and Communication Systems	31	7
43.1	1221	Casting	0	0
43.2	1222	Welding	0	0
43.3	1223	Thermal Treatment	0	0

43.4	1225	Turnery	0	0
43.5	1224	Locksmith	0	0
44	596	Study practice on analysis and synthesis of analog and pulse circuits and devices	23	1
<i>Elective courses</i>				
34.1	707	Course in Foreign Language in Engineering	23	3
35.1	557	Information Theory and Channel Encoding	31	5
35.2	559	Discrete Structures	31	5
36.1	550	Intelligent Systems for Security and Protection	31	6
36.2	562	Sensors and Personal Wireless Networks	31	6
37.1	526	Mobile Telecommunications	23	4
37.2	563	Fixed Networks	23	4
38.1	527	Terminal Interfaces and Protocols	23	6
38.2	565	Computer-based on-board Safety Systems	23	6
<i>Optional courses</i>				
39.1	591	Parametrization and diagnosis of safety equipment	23	4
40.1	594	Regulations for Communication and Security Equipment	23	4
41.1	593	Operation of Communication and Safety Equipment	38	6