"Todor Kableshkov" University of Transport

Faculty: Telecommunications and Electrical Equipment in Transport

Programme: Telecommunications and Signalling
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
Compulsory courses				
1	811	Mathematics part I	75	7
2	1114	Physics	90	7
3	821	Informatics	90	7
4	703	Economic History	45	4
5	702	Economics	45	4
6.1	1221	Casting	0	0
6.2	1222	Welding	0	0
6.3	1224	Locksmith	0	0
6.4	1225	Turnery	0	0
6.5	1223	Thermal Treatment	0	0
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 Engineeing part I	90	8
12	815	Mathematics part III	60	6
13	1102	Theoretical Electrical Engineeing part II	60	6
14	1110	Electrical and Electronic Measurements	75	5
15	1006	Fundamentals of Machine Design and Construction	90	6
16	501	Semiconductor Elements	75	7
17	552	Computer Systems and Architectures	75	7
18	553	Signals and Systems	75	7
19	554	Communication Circuits	45	4
20	508	Automatics and Telemechanics Theory	75	7
21	503	Analogue and Digital Systems	45	4
22	555	Analysis and Synthesis of Analogue and Pulse Circuits and Devices - practicum	0	0
23	502	Digital and Microprocessor Systems	75	6
24	556	Information-Managing Systems and Processes	60	5
25	557	Information Theory and Channel Encoding	60	5
26	507	Power Supply Equipment	60	6
27	514	Reliability and Safety Theory	45	3
28	534	Optic Technologies and Networks	60	5
29	512	Radio Communications	75	7
30	558	Computer Communications and Networks	45	4
31	559	Discrete Structures	60	6
32	560	Rolling Stock Positioning and Management	45	3
33	516	Automatic Traffic Control	75	7
34	517	Automatic Traffic Control - make a project	0	3

35	518	Design and Technology of Telecommunications and Signalling	75	6
36	561	Communication and Computer Terminals	75	6
37	520	Interlocking and Signalling Systems	75	6
38	521	Interlocking and Signalling Systems - make a project	0	3
39	522	Remote Control Systems and Management in Transport	60	4
40	523	Computer-aided Modelling and Simulation	45	3
41	564	Measurement, Control and Diagnostics of Computer and Communication Systems	75	7
42	719	Physical Education and Sports	0	0
	721	Political Science	45	4
Elective courses				
43.1	526	Mobile Telecommunications	60	5
43.2	562	Sensors and Personal Wireless Networks	60	5
44.1	550	Intelligent Systems for Security and Protection	60	4
44.2	563	Fixed Networks	60	4
45.1	527	Terminal Interfaces and Protocols	60	6
45.2	565	Computer-based on-board Safety Systems	60	6
Optional courses				
46	591	Parametrization and diagnosis of safety equipment	45	4
47	188	Regulations in Railway Transport	45	4
48	593	Operation of Communication and Safety Equipment	75	6