"Todor Kableshkov" University of Transport

Faculty: Telecommunications and Electrical Equipment in Transport

Programme: Electric Vehicles
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
Compulsory courses				
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	914	Applied Mechanics	38	7
9	1101	Theoretical Electrical Engineeing part I	38	8
10	1102	Theoretical Electrical Engineeing part II	38	8
11	1006	Fundamentals of Machine Design and Construction	38	7
12	1110	Electrical and Electronic Measurements	38	8
13	13197	Electrotechnical materials	30	7
14	13165	Technical and Fire Safety	23	3
15	13171	General Drive of Hybrid and Electric Vehicles	23	3
16	1309	Power Electronics	38	7
17	1304	Electrical Apparatuses	38	8
18	1303	Electrical Machines	38	7
19	1308	Electrical Supply	30	6
20	13198	Sensor and transducer technology	30	7
21	696	Hydraulic and Pneumatic Systems in Electric Transport	23	4
22	13129	Technically Automation Tools	38	7
23	13173	Electricity supply systems for electric vehicles	30	6
24	1307	Electrical Equipment	38	6
25	13174	Electromotive electric drive	38	6
26	13175	Electromotor electric drive - course project	0	3
27	13176	Autonomous power supply for electric vehicles	23	4
28	13177	Traction and energy calculations for electric vehicles	30	6
29	13180	Diagnostics and testing of electric vehicles	30	6
30	13181	Digital and microprocessor engineering in electric vehicles	30	6
31	13182	Ecological problems of electrical mobility	30	4
32	13183	Modern tendencies in the development of electric mobility	23	4
38.1	13188	Technical Operation of Electrical Systems of Hybrid Vehicles	30	8
	1224	Locksmith	0	0
	1225	Turnery	0	0

	1223	Thermal Treatment	0	0
	1222	Welding	0	0
	1221	Casting	0	0
Elective courses				
33.1	707	Course in Foreign Language in Engineering	23	3
34.1	13224	Design of equipment for charging electric cars	23	6
34.2	13225	Design of electrical equipment of electric vehicles	23	6
35.1	13226	Design of equipment for charging electric cars - course project	0	3
35.2	13227	Design of electrical equipment of electric vehicles - course project	0	3
36.1	13184	Hybrid cars	30	5
36.2	13185	Electric cars with autonomous power supplies	30	5
37.1	13186	Traction and propulsion protection systems for hybrid cars	30	8
37.2	13187	Systems for controlling and protecting traction electric drive of electric vehicles	30	8
38.2	13189	Technical operation of electrical systems of electric vehicles	30	8
40.1	13195	Service technology for the electrical systems of hybrid cars	38	6
40.2	13196	Technology of service servicing of electrical systems of electric vehicles	38	6
Optional courses				
39.1	13193	Safety and health in the operation of hybrid cars	30	4
39.2	13194	Safety and health in the operation of electric vehicles with autonomous power	30	4