

CURRICULUM

Bachelor's degree program in Transport Machinery and Technology

ECTS Subject code T pTMT No
 - T – type of course: B for BEng, M for MEng;
 - I - IV semester – fundamental subjects - professional field 5.5 Transport, Shipping and Aviation;
 - TMT – specialty “Transport Machinery and Technology” in Bulgarian;
 - p - additional symbol for Plovdiv Branch
 - № – number of the subject;
 Lectures (L), Tutorials (Tut.), Labs (Lab.), Auditorium Total (AT), Self-Study (SS), Exam (E),
 Continuous Assessment (CA), Semester Project (SP), Semester Assignment (course work) (SA).

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER I													
1	MAT12	Mathematics I	30	30	0	60	150	210	1				7
2	PHY01	Physics	45	15	30	90	120	210	1				7
3	CHE01	Chemistry	30	0	15	45	105	150		1			5
4	CCE23	Information and Communication Technologies	30	0	45	75	165	240	1			1	8
5	LNG01	Foreign Language I	0	30	0	30	30	60		1			2
6	SPR01	Sport	0	0	0	0	30	30		1			1
Total			135	75	90	300	600	900	3	3	0	1	30
SEMESTER II													
7	MAT22	Mathematics II	30	30	0	60	120	180	1				6
8	ENG01	Material Science	45	0	45	90	120	210	1			1	7
9	MEC01	Mechanics I	30	15	15	60	150	210	1			1	7
10	EEA21	Basics of Electrical Engineering and Electronics	30	0	30	60	90	150		1			5
11	LNG02	Foreign Language II	0	30	0	30	30	60		1			2
12	PRC01	Practicum	0	0	0	0	60	60		1			2
13	SPR02	Sport	0	0	0	0	30	30		1			1
Total			135	75	90	300	600	900	3	4	0	2	30
SEMESTER III													
14	MAT31	Mathematics III	30	30	0	60	120	180	1				6
15	MEC02	Mechanics II	30	0	30	60	150	210	1			1	7
16	MEC03	Strength of Materials	45	0	30	75	135	210	1			1	7
17	ENG02	Engineering Graphics	30	0	45	75	105	180		1		1	6
18	CCE24	Internet Technologies	15	15	0	30	60	90		1			3
19	SPR03	Sport	0	0	0	0	30	30		1			1
Total			150	45	105	300	600	900	3	3	0	3	30
SEMESTER IV													
20	MEC10	Machine Elements	45	0	30	75	105	180	1				6
21	MEC11	Fluid Mechanics	30	0	30	60	90	150	1				5
22	ENR04	Thermodynamics and Heat Transfer	30	0	30	60	60	120	1				4
23	MEC09	Theory of Machines and Mechanisms	30	0	15	45	75	120	1			1	4
24	EEA23	Analog and Digital Circuits	30	15	15	60	90	150		1		1	5
25	MEC07	Machine Elements - project	0	0	0	0	90	90			1		3
26	PRC02	Practicum	0	0	0	0	60	60		1			2
27	SPR04	Sport	0	0	0	0	30	30		1			1
Total			165	15	120	300	600	900	4	3	1	2	30

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER V													
28	BpTMT01	Theory of Internal Combustion Engines	30	0	30	60	90	150	1				5
29	BpTMT02	Theory of Automobile	30	0	30	60	90	150	1			1	5
30	BpTMT03	Manufacturing Technologies	30	15	0	45	75	120	1				4
31	BpTMT04	Technology and Organization of Railway Transport	30	0	15	45	75	120		1			4
32	BpTMT05	Performance Materials in Transport Equipment	30	0	15	45	75	120	1				4
33	BpTMT06	Finite Element Method	15	0	30	45	105	150		1			5
34	BpTMT07	Theory of Internal Combustion Engines - project	0	0	0	0	90	90			1		3
Total			165	15	120	300	600	900	4	2	1	1	30
SEMESTER VI													
35	BpTMT08	Design of Internal Combustion Engines	30	0	30	60	90	150	1			1	5
36	BpTMT09	Construction of Automobile	30	0	30	60	90	150	1				5
37	BpTMT10	Railroad cars	30	0	30	60	90	150	1				5
38	BpTMT11	Technology and Organization of Road Transport	30	0	15	45	75	120		1			4
39	BpTMT12	Electrical Equipment of Transport	30	0	15	45	75	120	1				4
40	BpTMT13	Oscillations and Measurements in Transport Equipment	30	0	15	45	75	120		1			4
41	BpTMT14	Construction of Automobile - project	0	0	0	0	90	90			1		3
Total			180	0	135	315	585	900	4	2	1	1	30
SEMESTER VII													
42	BpTMT15	Railway Tractive Rolling Stock	30	0	30	60	90	150	1				5
43	BpTMT16	Systems of Internal Combustion Engines	30	0	15	45	105	150	1				5
44	BpTMT17	Automotive Transmissions	30	0	15	45	105	150	1				5
45	BpTMT18	Technologies and Equipment for Train Controlling	30	0	15	45	75	120		1			4
46	BpTMT19	Maintenance and Repair of Transport Machinery	30	0	15	45	75	120	1				4
47	BpTMT20	Hydraulic and Pneumatic Machines and Fluid Power Systems	30	0	15	45	75	120		1			4
48	BpTMT21	Railway Tractive Rolling Stock - project	0	0	0	0	90	90			1		3
Total			180	0	105	285	615	900	4	2	1	0	30
SEMESTER VIII													
49	BpTMT22	Road Traffic Safety	30	20	0	50	70	120	1				4
50	BpTMT23	Loading- Unloading Processes	30	15	0	45	75	120	1				4
51	BpTMT24	Economics of Transport	20	15	0	35	85	120		1			4
52	BpTMT25	Optional Subject from List 1	20	0	15	35	85	120	1				4
53	BpTMT26	Optional Subject from List 2	20	0	15	35	85	120	1				4
54	BpTMT27	Diploma project	0	0	0	0	300	300	Defense of diploma thesis			10	
Total			120	50	30	200	700	900	4	1	0	0	30

LIST OF THE OPTIONAL SUBJECTS

List 1		ECTS = 4
1	Transport and ecology	BpTMT25.1
2	Combustion Engines Diagnosis	BpTMT25.2
List 2		ECTS = 4
1	Forklifts	BpTMT26.1
2	Wheeled and crawler tractors	BpTMT26.2

LIST OF THE FACULTATIVE SUBJECTS

№	Code	SUBJECT	Semester Load						Assesment				ECTS credits
			L	Tut.	Lab.	AT	SS	Total	E	CA	SP	SA	
SEMESTER I													
1	FaBpTMT01	Introduction to the specialty	15	0	0	15	15	30		1			1
SEMESTER V													
1	FaSPR05	Sport	0	0	0	0	30	30		1			1
2	FaBpTMT02	Specialized English	0	30	0	30	30	60		1			2
SEMESTER VI													
1	FaSPR06	Sport	0	0	0	0	30	30		1			1
2	FaBpTMT03	Project Management (in English)	15	0	30	45	45	90		1			3
SEMESTER VII													
1	FaSPR07	Sport	0	0	0	0	30	30		1			1
SEMESTER VIII													
1	FaSPR08	Sport	0	0	0	0	30	30		1			1