Burgas State University "Prof. Dr. Assen Zlatarov"

Aproved:
Rektor
(prof. S. Sotirov PhD)

Curriculum for acquiring higher education

in the speciality Transport vehicles and tehnologies
Educational and qualification degree Bachelor

Field of higher education: 5. Technical science
Professional field: 5.5. Transport, shipping and aviation
Professional qualification: Transport vehicles and tehnologies engineer
Term of study: 4 years
Form of education: full-time

Aproved by the FC FTS Protokol № 45/12.11.26
Aproved by the AC Protokol № 69/19.11.26

I. STUDY TIME FUND

course	Auditirium	Exam sessions	Практики: Educational	Educational and production	Specializing	State exam	Holidays	Total
	weeks	weeks	weeks	weeks	weeks	weeks	weeks	weeks
I.	30	11					11	52
II.	30	11					11	52
III.	30	11					11	52
IV.	30	11				8	3	52

II. CURRICULUM PARAMETERS

1.

Auditorial, h.	(A)	2395	%
Lectires	(L)	1170	48.9
Seminar	(S)	90	3.8
Practicals	(P)	1135	47.4
Physical Education and Sport		60	hours

Practices		number	hours
Educational	(e)	2	70
Educational and production	(ep)	0	0
Specializing	(sp)	0	0

Extracurricular, h. (E) 4805 ч.
Auditorial/Extracurricular, (A/E) 49.8 %

2.

Subjects		number	hours	%
Obligatory	(o)	42	2215	89.1
Elective	(e)	5	180	7.2
Facultative	(f)	3	90	3.6

		numbe	hours
Course projects	(cp)	2	75
Course works	(cw)	5	150

3. **Forms of control (FC):** Exams 26 | Current Assessments (CA) 24 | Verifications (V) 0

4. **Form of completion:** **State Exam/Bachelor's thesis**

5. **Schedule of the educational process: Approved annually by the Academic Council.**

III. PLAN OF THE EDUCATIONAL PROCESS

	First Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Calculus, Part I	O	30		30			60	120	50.0	E	6
2.	Introduction to the Field of Study	O	15		15			30	120	25.0	E	5
3.	Information Technology	O	30				30	60	120	50.0	E	6
4.	Fundamentals of Engineering Design - Part I	O	30	cw			30	60	120	50.0	CA	6
5.	Material science	O	30				30	60	90	66.7	CA	5
6.	Foreign Language of choice from List 1	E					30	30	30	100.0	CA	2
7.	Physical Education and Sport										CA	
	Total:		135		45		120	300	600	50.0		30

	Second Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Calculus, Part II	O	30				30	60	90	66.7	E	5
2.	Mechanics, Part I	O	45		30			75	135	55.6	E	7
3.	Physics	O	45				30	75	105	71.4	E	6
4.	Fundamentals of Engineering Design - Part II	O	15	cw			30	45	105	42.9	CA	5
5.	Transport Technology and Organization	O	30		15			45	105	42.9	E	5
6.	Specialized Foreign Language from List 1	E					30	30	30	100.0	CA	2
7.	Physical Education and Sport										CA	
	Total:		165		45		120	330	570	57.9		30

	Third Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Mechanics, Part II	O	30	cw			30	60	120	50.0	E	6
2.	Strength of Materials - Part I	O	30				30	60	120	50.0	CA	6
3.	Machine Elements	O	30				30	60	90	66.7	E	5
4.	Fluid Mechanics	O	30				15	45	75	60.0	CA	4
5.	Transport Systems and Sustainable Development	O	30				30	60	90	66.7	E	5
6.	Application software	O	15				45	60	60	100.0	CA	4
	Total:		165				180	345	555	62.2		30

	Fourth Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Strength of Materials - Part II	O	30	cw			30	60	120	50.0	E	6
2.	Tanks and pressure vessels	O	30				30	60	120	50.0	E	6
3.	Hydraulics and Pneumatics	O	30				30	60	120	50.0	E	6
4.	Metrology and Measuring Technique	O	30				15	45	105	42.9	CA	5
5.	Electronics and electrical engineering	O	30				30	60	90	66.7	CA	5
6.	Technical Safety and Disaster Protection	O	15				15	30	30	100.0	CA	2
	Total:		165				150	315	585	53.8		30

	Fifth Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Internal Cambustion Engines - Part I	O	30				30	60	120	50.0	E	6
2.	Automotive Engineering – Part I	O	45				30	75	135	55.6	E	7
3.	Ships and marine structures	O	30				30	60	120	50.0	E	6
4.	Intelligent Transport Systems	O	30	cw			30	60	120	50.0	CA	6
5.	Operational characteristics of fuels and oils	O	15				15	30	120	25.0	CA	5
6.	Facultative subject (list 5)	F									CA	
	Total:		150				135	285	615	46.3		30

	Sixth Semester		L	S		P		A	E	A/E	FC	Credits
№	Subject	Type	h.	type	h.	type	h.	h.	h.	%		
1.	Internal Cambustion Engines - Part II	O	30	cp			30	60	120	50.0	E	6
2.	Automotive Engineering – Part II	O	30	cp			45	75	135	55.6	E	7
3.	Reliability of transport vehicles	O	30				30	60	90	66.7	E	5
4.	CAD Technology in Transport	O	30				30	60	90	66.7	CA	5
5.	Elective Subject from List 2	E	15				15	30	90	33.3	CA	4
6.	Practical Training	O				e	40	40	50	80.0	CA	3
7.	Facultative subject (list 5)	F									CA	
	Total:		135				190	325	575	56.5		30

	Seventh semester	L	S	P	A	E	A/E	FC	Credits

№	Subject	Type	L h.	type	S h.	type	P h.	A h.	E h.	A/E %	FC	Credits
1.	Green Chemistry in Transport	O	30				15	45	135	33.3	CA	6
2.	Vehicle Transmissions	O	30				30	60	120	50.0	E	6
3.	Diagnostics of Automotive Equipment	O	30				30	60	120	50.0	E	6
4.	Theory of Automatic Control	O	30				15	45	75	60.0	CA	4
5.	Maintenance and repair of transport vehicles	O	30				45	75	105	71.4	E	6
6.	Transport Machinery (Practical Training)	O				y	30	30	30	100.0	CA	2
7.	Facultative subject (list 5)	F									CA	
	Total:		150				165	315	585	53.8		30

Eighth Semester

№	Subject	Type	L h.	type	S h.	type	P h.	A h.	E h.	A/E %	FC	Credits
1.	Technologies in Fuel Transmission	O	30				30	60	120	50.0	E	6
2.	Elective subject from List 3	E	30				15	45	105	42.9	E	5
3.	Elective subject from List 4	E	30				15	45	105	42.9	E	5
4.	Mathematical Modeling	O	15				15	30	90	33.3	E	4
5.	State Exam/Bachelor's thesis								300			10
	Total:		105				75	180	720	25.0		30

Lists of Facultative and Elective Subjects

List 1	
1.	Russian language
2.	English language
3.	German language
4.	

List 2	
1.	Transport Operation and Safety
2.	Commercial and Freight Forwarding Relations in Transpo
3.	Communication Technologies in Transport
4.	

List 3	
1.	Dynamics and Vibrations of Transport Machinery
2.	Oil and gas pipeline control technologies
3.	

List 4	
1.	Electronic Systems in Transport Technology
2.	Electric Vehicles
3.	

List 5	
1.	Wireless Technologies in Transport
2.	Socio-psychological training
3.	STEM-based learning
4.	Marketing

List 6	
1.	
2.	
3.	
4.	

Note 1 The Bulgarian language exam for foreign students is considered a foreign language exam.

Note 2 The discipline "Physical Education and Sports" is studied in the Bachelor's Degree Program, a full-time form of study, in the first year (I and II semesters) with a teaching load of 30 hours of classroom work per semester, whereby two credits are acquired per semester. The form of control is a continuous assessment. In the following academic years (from the 3rd to the 8th semester for the Bachelor's Degree Program), the academic discipline "Physical Education and Sports" is studied optionally with a teaching load of 30 hours per semester, whereby one credit is acquired per semester. The credits for this academic discipline are outside the total amount of 240 credits for the Bachelor's Degree Program.

Note 3: Elective courses consist of 15 hours of lectures and 15 hours of practical exercises, and are awarded 3 credits each. The total of 30 hours is in addition to the maximum number of hours required to obtain the professional qualification.

Approved by the FC Protocol № Approved by the AC Protokol №

Approved by the FC Protocol №	Approved by the AC Protokol №