Burgas State University "Prof. Dr. Assen Zlatarov"

Approved!
Rector:
(Prof. Dr. S. Sotirov)

Studies plan for the acquisition of higher education
in the specialty of Computer Systems and Technologies
Degree of education and qualification: Bachelor

Area of higher education:	5. Technical Sciences
Professional field:	5.3. Communication and Computer Technology
Professional qualification:	Computer engineer
Duration:	4 years (8 semesters)
Form:	Full-time

Approved by the FC of the FTS. Prot. No. 25/20.03.2025
Approved by the AC. Protocol No. 33/27.03.2025

I. TIME DISTRIBUTION

Course	Curricular engagement	Exam sessions	Practices:			State exam	Vacations	All
			Educational	On-the-job	Specialized			
	weeks	weeks	weeks	weeks	weeks	weeks	weeks	weeks
I.	30	11					11	52
II.	30	11					11	52
III.	30	11		3			8	52
IV.	30	11				9	2	52

II. PARAMETERS OF THE STUDIES PLAN

1.

Curricular activities, hrs	**(C)**	2220	%
Lectures	**(L)**	915	41,2
Seminar exercises	**(S)**	225	10,1
Practical exercises	**(P)**	1080	48,6
Physical education and sports		60	hrs

Practices		count	hours
Educational	**(ep)**	2	90
On-the-job	**(op)**	0	0
Specialized	**(sp)**	1	30

Extracurricular activities, hrs (E) 4980 hrs
Curricular/Extracurricular = 44,6 %

2.

Disciplines	count	hours	%
Compulsory (C)	39	1935	84,9
Optional (O)	6	285	12,5
Facultative (F)	2	60	2,6

		count	hours
Course projects	**(cp)**	6	240
Course works	**(cw)**	0	0

3.

Forms of Control (FC):	Exams (e) 28	Ongoing Assessment (oa) 17	Credits (c) 0

4. **Completion Form: State Examination**

5. **Semestral classes schedule: Approved annually by the Academic Council.**

III. Plan of the Educational Process

	First Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Higher Mathematics I Part	C	30		30			60	120	50,0	E	6
2.	Electrical Engineering and Electrical Measurements	C	45				45	90	180	50,0	E	9
3.	Introduction to Programming	C	30				30	60	120	50,0	OA	6
4.	Fundamentals of Engineering Design	C	15	cw			45	60	120	50,0	OA	6
5.	English Language	C			30			30	60	50,0	OA	3
	Total:		120		60		120	300	600	50,0		30
	Second Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Higher Mathematics II Part	C	30		30			60	120	50,0	E	6
2.	Object-Oriented Programming - Part 1	C	30				30	60	120	50,0	E	6
3.	Signals and Systems	C	30	cw			30	60	120	50,0	E	6
4.	Optional Discipline from List 1	O	15	cw			15	30	90	33,3	E	4
5.	Computer Systems	C	15				15	30	90	33,3	OA	4
6.	English Language	C			30			30	90	33,3	OA	4
	Total:		120		60		90	270	630	42,9		30
	Third Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Digital Circuit Design	C	30		30			60	150	40,0	E	7
2.	Optional Practice from List 6	O		cp			45	45	135	33,3	OA	6
3.	Logic Circuit Analysis and Synthesis	C	30				30	60	150	40,0	E	7
4.	Object-Oriented Programming - Part 2	C	30				30	60	150	40,0	E	7
5.	English Language	C			30			30	60	50,0	OA	3
	Total:		90		60		105	255	645	39,5		30
	Fouth Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Algorithm Synthesis and Analysis	C	30				30	60	120	50,0	E	6
2.	Computer Architectures	C	30				30	60	120	50,0	E	6
3.	Discrete Structures	C	30				30	60	120	50,0	E	6
4.	Databases	C	30				30	60	120	50,0	E	6
5.	Specialized Practice	C		cp		sp	30	30	60	50,0	OA	3
6.	English Language	C			30			30	60	50,0	OA	3
	Total:		120		30		150	300	600	50,0		30
	Fifth Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Software Design	C	30				30	60	120	50,0	E	6
2.	Programming Languages	C	30	cp	15		30	75	135	55,6	E	7
3.	Computer Networks	C	30				30	60	120	50,0	E	6
4.	Graphics and Visualization	C	30				30	60	120	50,0	E	6
5	Databases (Practice)	C		cp		ep	45	45	105	42,9	OA	5
	Total:		120		15		165	300	600	50,0		30
	Sixth Semester		L		S		P	A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Cybersecurity	C	30				30	60	120	50,0	E	6
2.	Internet of Things (IoT)	C	30				30	60	120	50,0	E	6
3.	Operating Systems	C	30				30	60	120	50,0	E	6
4.	Optional Practice from List 5	O		cp			45	45	105	42,9	OA	5
5.	Embedded Systems	C	30				30	60	150	40,0	E	7
6.	Optional Discipline from List 7	F									OA	
	Total:		120				165	285	615	46,3		30

	Seveth Semester		L	S		P		A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Computer Peripherals	C	30				30	60	120	50,0	E	6
2.	Educational and Industrial Practice	C		cp		ep	45	45	75	60,0	OA	4
3.	Information Systems	C	30				30	60	120	50,0	E	6
4.	Artificial Intelligence	C	30				30	60	120	50,0	E	6
5.	Parallel and Distributed Systems	C	15				30	45	105	42,9	E	5
6.	Technical Safety and Disaster Management	C	15				15	30	60	50,0	OA	3
	Total:		120				180	300	600	50,0		30
	Eight Semester		L	S		P		A	I	A/E	FC	Credits
№	Discipline	Type	hrs	type	hrs	type	hrs	hrs	hrs	%		
1.	Industrial Process Management	C	15				30	45	75	60,0	OA	4
2.	Optional Discipline from List 2	O	30				15	45	75	60,0	E	4
3.	Optional Discipline from List 3	O	30				30	60	120	50,0	OA	6
4.	Optional Discipline from List 4	O	30				30	60	120	50,0	E	6
5.	Facultative Discipline from List 8	F									OA	
6.	State Examination	C							300		E	10
	Total:		105				105	210	690	30,4		30

Lists of optional and facultative disciplines

	List 1
1.	Electronics
2.	Materials in Electronics
3.	

	List 2
1.	Economics
2.	Management and Leadership
3.	Project Management

	List 3
1.	Cryptographic Methods for Protection
2.	Server-side Web Programming
3.	Scripting and Functional Programming
4.	

	List 4
1.	Wireless Networks
2.	Signal Processors
3.	
4.	

	List 5
1	Computer Networks
2	Synthesis and Analysis of Algorithms
3	
4	

	List 6
1.	Object-Oriented Programming
2.	Computer Systems
3.	Web Design

	List 7
1	Management and Leadership
2	Project Management
3	
4	

	List 8
1.	Economics
2.	Virtual and Augmented Reality
3.	

Note 1. The Bulgarian language exam for foreign students is counted as an exam in a foreign language.

Note 2. The discipline "Physical Education and Sport" is studied during the first year (I and II semester) with workload of 30 hours for each semester, whereby two credits are acquired per semester. The form of control is ongoing assessment. In the following academic years (from III to VIII semester for the Bachelor's Degree Program), the discipline "Physical Education and Sport" is studied facultatively with workload of 30 hours per semester, whereby one credit is acquired per semester. The credits for the subject are outside the total amount of 240 credits for the Bachelor's Degree Program

Note 3. The facultative discipline from List 7 is studied with a workload of 15 hours of seminar exercises and awards 2 credits. The total workload of 15 hours is outside the maximum workload for obtaining a professional qualification. The course ends with an ongoing assessment.
Note 4. The facultative discipline from List 8 is studied with a workload of 8 hours of lectures and 8 hours of exercises and awards 2 credits. The total workload of 30 hours is outside the maximum workload for obtaining a professional qualification. The course ends with an ongoing assessment.

IV. Notes on the changes made to this studies plan	
Approved by the FC Protocol №	Approved by the Academic Council (AC) №
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Approved by the FC Protocol № 32/14.10.25г.	Approved by the Academic Council (AC) № 49/23.10.2025г.