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: Part-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.	8	29					15	52
II.	8	29					15	52
III.	8	29		2			13	52
IV.	8	29				8	7	52

II. PARAMETERS OF THE STUDIES PLAN

1.

Curricular activities, hrs		(C)	1119	%
Lectures		(L)	461	41.2
Seminar exercises		(S)	113	10.1
Practical exercises		(P)	545	48.7
Physical education and sports			0	hrs

Practices		count	hours
Educational	(ep)	2	46
On-the-job	(op)	0	0
Specialized	(sp)	1	15

Extracurricular activities, hrs (E) 6081
Curricular/Extracurricular = 18.4

2.

Disciplines	count	hours	%
Compulsory (C)	37	974	84.8
Optional (O)	6	145	12.6
Facultative (F)	2	30	2.6

		count	hours
Course projects	(cp)	6	122
Course works	(cw)	3	46

3.

Forms of Control (FC):	Exams (e)	45	Ongoing Assessment (oa)	0	Credits (c)	0

4. **Completion Form: State Examination / Thesis**

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

III. Plan of the Educational Process

№	First Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Higher Mathematics I Part	C	15		15			30	150	20.0	E	6
2.	Electrical Engineering and Electrical Measurements	C	23				23	46	224	20.5	E	9
3.	Introduction to Programming	C	15				15	30	150	20.0	E	6
4.	Fundamentals of Engineering Design	C	8	cw			23	31	149	20.8	E	6
5.	English Language	C			15			15	75	20.0	E	3
	Total:		61		30		61	152	748	20.3		30

№	Second Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Higher Mathematics II Part	C	15		15			30	150	20.0	E	6
2.	Object-Oriented Programming - Part 1	C	15				15	30	150	20.0	E	6
3.	Signals and Systems	C	15	cw			15	30	150	20.0	E	6
4.	Optional Discipline from List 1	O	8	cw			8	16	104	15.4	E	4
5.	Computer Systems	C	8				8	16	104	15.4	E	4
6.	English Language	C			15			15	105	14.3	E	4
	Total:		61		30		46	137	763	18.0		30

№	Third Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Digital Circuit Design	C	15		15			30	180	16.7	E	7
2.	Optional Practice from List 6	O		cp			23	23	157	14.6	E	6
3.	Logic Circuit Analysis and Synthesis	C	15				15	30	180	16.7	E	7
4.	Object-Oriented Programming - Part 2	C	15				15	30	180	16.7	E	7
5.	English Language	C			15			15	75	20.0	E	3
	Total:		45		30		53	128	772	16.6		30

№	Fouth Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Algorithm Synthesis and Analysis	C	15				15	30	150	20.0	E	6
2.	Computer Architectures	C	15				15	30	150	20.0	E	6
3.	Discrete Structures	C	15				15	30	150	20.0	E	6
4.	Databases	C	15				15	30	150	20.0	E	6
5.	Specialized Practice	C		cp		sp	15	15	75	20.0	E	3
6.	English Language	C			15			15	75	20.0	E	3
	Total:		60		15		75	150	750	20.0		30

№	Fifth Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Software Design	C	15				15	30	150	20.0	E	6
2.	Programming Languages	C	15	cp	8		15	38	172	22.1	E	7
3.	Computer Networks	C	15				15	30	150	20.0	E	6
4.	Graphics and Visualization	C	15				15	30	150	20.0	E	6
5	Databases (Practice)	C		cp		ep	23	23	127	18.1	E	5
	Total:		60		8		83	151	749	20.2		30

№	Sixth Semester	Type	L hrs	S type	S hrs	P type	P hrs	A hrs	I hrs	A/E %	FC	Credits
1.	Cybersecurity	C	15				15	30	150	20.0	E	6
2.	Internet of Things (IoT)	C	15				15	30	150	20.0	E	6
3.	Operating Systems	C	15				15	30	150	20.0	E	6
4.	Optional Practice from List 5	O		cp			23	23	127	18.1	E	5
5.	Embedded Systems	C	15				15	30	180	16.7	E	7
6.	Optional Discipline from List 7	F									E	
	Total:		60				83	143	757	18.9		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	15				15	30	150	20.0	E	6
2.	Educational and Industrial Practice	C		cp		ep	23	23	97	23.7	E	4
3.	Information Systems	C	15				15	30	150	20.0	E	6
4.	Artificial Intelligence	C	15				15	30	150	20.0	E	6
5.	Parallel and Distributed Systems	C	8				15	23	127	18.1	E	5
6.	Technical Safety and Disaster Management	C	8				8	16	74	21.6	E	3
	Total:		61				91	152	748	20.3		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	8				15	23	97	23.7	E	4
2.	Optional Discipline from List 2	O	15				8	23	97	23.7	E	4
3.	Optional Discipline from List 3	O	15				15	30	150	20.0	E	6
4.	Optional Discipline from List 4	O	15				15	30	150	20.0	E	6
5.	Facultative Discipline from List 8	F									E	
6.	State Examination / Thesis	C							300		E	10
	Total:		53				53	106	794	13.4		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 facultative discipline from List 7 is studied with a workload of 8 hours of seminar exercises and awards 2 credits. The credits for this academic discipline are outside the total amount of credits for the Bachelor's degree. The course ends with an ongoing assessment.
Note 3. 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 credits for this academic discipline are outside the total amount of credits for the Bachelor's degree. The course ends with an ongoing assessment.

IV. Notes on the changes made to this studies plan	
Approved by the FC Protocol № 25/20.03.2025	Approved by the Academic Council (AC) № 33/27.03.2025
Approved by the FC Protocol № 42/09.07.2026	Approved by the Academic Council (AC) № 64/23.07.2026
Approved by the FC Protocol №	Approved by the Academic Council (AC) №
Approved by the FC Protocol №	Approved by the Academic Council (AC) №
Approved by the FC Protocol №	Approved by the Academic Council (AC) №