



CURRICULUM

Professional orientation: **Communications and Computer Engineering**

Program: **Computing**

Professional qualification: **Computer Engineer**

Educational and qualificational degree: **Bachelor**

Form of study: **Full - Time**

Term of study: **4 years / 8 semesters**

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Basic Mathematics for Engineering	1				30		30		180	120	300	7
2	Computer Systems Fundamentals	1				30		30		180	120	300	7
3	Programming Fundamentals	1				30		30		180	120	300	7
4	Electrical Engineering	1				30		30		165	105	270	6
5	English				1		30			60	30	90	2
6	Optional Subject				1					30	30	60	1
6a	Specialized Sport Activities, part 1				1						30	30	1
66	Sport and Social Adaptation, part 1				1						30	30	1
Total for the 1 semestar:		4			2	120	30	120		795	525	1320	30
7	Mathematics for Computing	2				30		30		180	120	300	7
8	Algorithms and Data Structures	2				30		30		180	120	300	7
9	Analysis and Synthesis of Digital Logic	2				30		30		180	120	300	7
10	Computer Electronics	2				30		30		135	75	210	5
11	Practical Training, part 1				2					30	30	60	1
12	Optional Subject				2					30	30	60	1
12a	Specialized Sport Activities, part 2				2						30	30	1
126	Sport and Social Adaptation, part 2				2						30	30	1
Total for the 2 semestar:		4			2	120		120		735	495	1230	28
13	Discrete Structures	3				30	30			135	75	210	5
14	Electronics Measurement	3				30		30		180	120	300	7
15	Object-Oriented Programming Fundamentals (C++)	3				30		30		180	120	300	7
16	Web Design		3			15		30		135	90	225	5
17	Computer Organization	3				30		30		180	120	300	7
18	Practical Training, part 2				3					30	30	60	1
19	Optional Subject				3					30	30	60	1
19a	Specialized Sport Activities, part 3				3						30	30	1
196	Sports Management, part 1				3						30	30	1
Total for the 3 semestar:		4	1		2	135	30	120		870	585	1455	33
20	Advanced Object-Oriented Programming (Java)	4				30		30		180	120	300	7

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
21	System Analysis	4				30		30		165	105	270	6
22	Microprocessors	4				30		30		135	75	210	5
23	Programming Systems	4				30		30		165	105	270	6
24	Digital Systems		4			30		30		165	105	270	6
25	Optional Subject			4					30	30	30	60	2
25a	Object-Oriented Programming Fundamentals (C++), project			4				30		30	30	60	2
25б	WEB Design, project			4				30		30	30	60	2
25B	Computer Organization, project			4				30		30	30	60	2
25r	Discrete Structures, project			4				30		30	30	60	2
25д	Computer Electronics, project			4				30		30	30	60	2
26	Optional Subject				4					30	30	60	1
26a	Specialized Sport Activities, part 4				4						30	30	1
26б	Sports Management, part 2				4						30	30	1
Total for the 4 semestar:		4	1	1	1	150		150	30	870	570	1440	33
27	Graphics and Visual Computing	5				30		30		165	105	270	6
28	Software Engineering		5			30		30		180	120	300	7
29	Data Bases	5				30		30		180	120	300	7
30	Computer Architectures	5				30		30		180	120	300	7
31	Computer Communications Fundamentals	5				30		30		165	105	270	6
32	Optional Subject			5					30	30	30	60	2
32a	Advanced Object-Oriented Programming (Java), project			5					30	30	30	60	2
32б	Microprocessors, project			5					30	30	30	60	2
32B	Programming Systems, project			5					30	30	30	60	2
32r	Digital Systems, project			5					30	30	30	60	2
32д	System Analysis, project			5					30	30	30	60	2
Total for the 5 semestar:		4	1	1		150		150	30	900	600	1500	35
33	Internet Programming Technologies	6				30		30		165	105	270	6
34	Microprocessor Systems	6				30		30		165	105	270	6
35	Computer Networks		6			30		30		135	75	210	5
36	Computer Peripherals	6				30		30		165	105	270	6
37	Operating Systems	6				30		30		180	120	300	7
38	Specialized Practice				6					150	150	300	5
39	Optional Subject			6					30	30	30	60	2
39a	Software Engineering, project			6					30	30	30	60	2
39б	Data Bases, project			6					30	30	30	60	2
39B	Computer Architectures, project			6					30	30	30	60	2
39r	Computer Communications Fundamentals, project			6					30	30	30	60	2
39д	Graphics and Visual Computing, project			6					30	30	30	60	2
Total for the 6 semestar:		4	1	1	1	150		150	30	990	690	1680	37
40	Optional Subject	7				30		30		180	120	300	7
40a	Compilers and Interpreters	7				30		30		60	120	180	7
40б	Multi-User Operating Systems	7				30		30		60	120	180	7
41	Networks Administration	7				30		30		180	120	300	7
42	Embedded Systems	7				30		30		180	120	300	7
43	Optional Subject	7				15		30		135	90	225	5
43a	Web Programming	7				15		30		45	90	135	5

No	Subject Name	Types of term control				Semester auditorium load					Unsupervised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
43б	Human Computer Interaction	7				15		30		45	90	135	5
44	Practical Training, part 3				7					60	60	120	2
45	Optional Subject			7					30	30	30	60	2
45а	Internet Programming Technologies, project			7					30	30	30	60	2
45б	Microprocessor Systems, project			7					30	30	30	60	2
45в	Computer Networks, project			7					30	30	30	60	2
45г	Computer Peripherals, project			7					30	30	30	60	2
45д	Operating Systems, project			7					30	30	30	60	2
Total for the 7 semestars:		4		1	1	105		120	30	765	540	1305	30
46	Optional Subject	8				30		30		165	105	270	6
46.а	Distributed Programming	8				30		30		60	105	165	6
46.б	Office Systems	8				30		30		60	105	165	6
46.в	Artificial Intelligence	8				30		30		60	105	165	6
46.г	Cryptography and Data Protection	8				30		30		60	105	165	6
46.д	Economics and Management	8				30		30		60	105	165	6
46.е	Programming Languages Semantics	8				30		30		60	105	165	6
46.ж	Programmable Logic Design	8				30		30		60	105	165	6
46.з	Multimedia Systems and Technologies	8				30		30		60	105	165	6
46.и	Real Time Systems	8				30		30		60	105	165	6
46.й	Object-Oriented Applications	8				30		30		60	105	165	6
46.к	E-commerce	8				30		30		60	105	165	6
46.л	Business Intelligence Systems	8				30		30		60	105	165	6
46.м	Computer and Network Security	8				30		30		60	105	165	6
46.н	Programming for Mobile Devices	8				30		30		60	105	165	6
46.о	Embedded Microcontrollers	8				30		30		60	105	165	6
47	Optional Subject	8				30		30		165	105	270	6
47.а	Distributed Programming	8				30		30		60	105	165	6
47.б	Office Systems	8				30		30		60	105	165	6
47.в	Artificial Intelligence	8				30		30		60	105	165	6
47.г	Cryptography and Data Protection	8				30		30		60	105	165	6
47.д	Economics and Management	8				30		30		60	105	165	6
47.е	Programming Languages Semantics	8				30		30		60	105	165	6
47.ж	Programmable Logic Design	8				30		30		60	105	165	6
47.з	Multimedia Systems and Technologies	8				30		30		60	105	165	6
47.и	Real Time Systems	8				30		30		60	105	165	6
47.й	Object-Oriented Applications	8				30		30		60	105	165	6
47.к	E-commerce	8				30		30		60	105	165	6
47.л	Business Intelligence Systems	8				30		30		60	105	165	6
47.м	Computer and Network Security	8				30		30		60	105	165	6
47.н	Programming for Mobile Devices	8				30		30		60	105	165	6
47.о	Embedded Microcontrollers	8				30		30		60	105	165	6
48	Optional Subject	8				30		30		165	105	270	6
48.а	Distributed Programming	8				30		30		60	105	165	6
48.б	Office Systems	8				30		30		60	105	165	6
48.в	Artificial Intelligence	8				30		30		60	105	165	6
48.г	Cryptography and Data Protection	8				30		30		60	105	165	6

No	Subject Name	Types of term control				Semester auditorium load					Unsuper vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
48.д	Economics and Management	8				30		30		60	105	165	6
48.e	Programming Languages Semantics	8				30		30		60	105	165	6
48.ж	Programmable Logic Design	8				30		30		60	105	165	6
48.з	Multimedia Systems and Technologies	8				30		30		60	105	165	6
48.и	Real Time Systems	8				30		30		60	105	165	6
48.й	Object-Oriented Applications	8				30		30		60	105	165	6
48.к	E-commerce	8				30		30		60	105	165	6
48.л	Business Intelligence Systems	8				30		30		60	105	165	6
48.м	Computer and Network Security	8				30		30		60	105	165	6
48.н	Programming for Mobile Devices	8				30		30		60	105	165	6
48.о	Embedded Microcontrollers	8				30		30		60	105	165	6
49	Preliminary Graduation Work			8					30	30	30	60	2
Total for the 8 semestar:		3		1		90		90	30	525	345	870	20
Total for all courses of education:		31	4	5	9	1020	60	1020	150	6450	4350	10800	246

Facultative subjects

No	Subject Name	Types of fern control				Semester auditorium load incl:					Unsuper-vised load	Total work hours	ECTS credits
		E	PA	CP	A	L	S	L	CP CPR	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis / Preparation for State Examination	8	300	10
Defence of Diploma Thesis / State Examination	8		

Note:

The curriculum is valid for teaching in Bulgarian and English language.

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Valid for 2018 / 2019 r. academic year.

Head of Department :

/ Assoc. Prof. PhD /

Dean of Faculty FCA:

/ Assoc. Prof. PhD Nikolov N. /