



CURRICULUM

Professional orientation: **Electrical Engineering, Electronics And Automation**

Program: **Electronics**

Professional qualification: **Electronic 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	Mathematics, part 1	1				15	45			195	135	330	7
2	Physics	1				30		30		195	135	330	7
3	Programming C++/C#		1			30		30		165	105	270	6
4	Standards in Electronics		1			15		30		165	120	285	6
5	English, part 1				1		30			60	30	90	2
6	Practical Training, part 1				1					30	30	60	1
7	Optional Subject				1					30	30	60	1
7a	Specialized Sport Activities, part 1				1						30	30	1
7b	Sport and Social Adaptation, part 1				1						30	30	1
Total for the 1 semestar:		2	2		3	90	75	90		840	585	1425	30
8	Mathematics, part 2	2				30	30			165	105	270	6
9	Circuit and Field Theory	2				30		30		195	135	330	7
10	Electronic Components		2			30		30		195	135	330	7
11	Materials in Electrical Engineering	2				30		30		165	105	270	6
12	English, part 2				2		30			60	30	90	2
13	Practical Training, part 2				2					30	30	60	1
14	Optional Subject				2					30	30	60	1
14a	Specialized Sport Activities, part 2				2						30	30	1
14b	Sport and Social Adaptation, part 2				2						30	30	1
Total for the 2 semestar:		3	1		3	120	60	90		840	570	1410	30
15	MATLAB Introduction		3			15	15	30		165	105	270	6
16	Automatic Control Theory	3				30		15		135	90	225	5
17	Semiconductor Devices and Integrated Circuits	3				30		30		165	105	270	6
18	Electrical Measurements	3				30		30		165	105	270	6
19	Electromechanical Systems		3			30		15		135	90	225	5
20	English, part 3		3				30			60	30	90	2
21	Optional Subject				3					30	30	60	1
21a	Specialized Sport Activities, part 3				3						30	30	1
21b	Sports Management, part 1				3						30	30	1

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
Total for the 3 semestar:		3	3		1	135	45	120		855	555	1410	31
22	Digital Circuits Design	4				30		30		195	135	330	7
23	Signals and Systems		4			30		30		165	105	270	6
24	Analysis and Synthesis of Electronic Circuits	4				30		30		195	135	330	7
25	Technical Safety		4			30		15		135	90	225	5
26	Design of Electronic Equipment	4				30		30		195	135	330	7
27	Optional Subject				4					30	30	60	1
27a	Specialized Sport Activities, part 4				4						30	30	1
27b	Sports Management, part 2				4						30	30	1
Total for the 4 semestar:		3	2		1	150		135		915	630	1545	33
28	Analog Circuits	5				30		30		195	135	330	7
29	Optoelectronic and Laser Devices		5			30		15		135	90	225	5
30	Microprocessor Systems, part 1	5				30		30		195	135	330	7
31	Electronic Design Automation	5				30		30		195	135	330	7
32	Power Supply Devices		5			30		30		165	105	270	6
33	Optional Subject			5					30	30	30	60	2
33a	Analysis and Synthesis of Electronic Circuits, project			5					30	30	30	60	2
33b	Design of Electronic Equipment, project			5					30	30	30	60	2
Total for the 5 semestar:		3	2	1		150		135	30	915	630	1545	34
34	Power Electronic Converters	6				30		30		195	135	330	7
35	Microprocessor Systems, part 2	6				30		30		195	135	330	7
36	Measurement Electronics	6				30		30		135	75	210	5
37	VHDL/Verilog Programming for Hardware Design		6			30		30		165	105	270	6
38	Communication Engineering		6			30		15		135	90	225	5
39	Optional Subject			6					30	30	30	60	2
39a	Electronic Design Automation, project			6					30	30	30	60	2
39b	Analog Circuits, project			6					30	30	30	60	2
40	Specialized Practice				6					120	120	240	4
Total for the 6 semestar:		3	2	1	1	150		135	30	975	690	1665	36
41	Digital Signal Processing	7				30		30		165	105	270	6
42	Sensors and Signal Conditioning	7				30		30		165	105	270	6
43	Industrial Electronics		7			30		30		165	105	270	6
44	Technical Devices for Automation		7			30		30		165	105	270	6
45	Optional Subject	7				30		30		165	105	270	6
45a	Microelectronics	7				30		30		60	105	165	6
45b	Devices for Imaging Diagnostics	7				30		30		60	105	165	6
46	Optional Subject			7					30	30	30	60	2
46a	Microprocessor Systems, part 2 - project			7					30	30	30	60	2
46b	Power Electronic Converters, project			7					30	30	30	60	2
Total for the 7 semestar:		3	2	1		150		150	30	855	555	1410	32
47	Medical Electronic Equipment	8				30		30		195	135	330	7
48	Optional Subject	8				30		30		195	135	330	7
48a	Smart Electronic Systems	8				30		30		60	135	195	7
48b	Acquisition and Processing of Biomedical Signals	8				30		30		60	135	195	7
49	Optional Subject	8				30		30		195	135	330	7
49a	Electronic Systems for Renewable Energy Sources	8				30		30		60	135	195	7

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
496	Acquisition and Processing of Biomedical Images	8				30		30		60	135	195	7
Total for the 8 semestar:		3				90		90		585	405	990	21
Total for all courses of education:		23	14	3	9	1035	180	945	90	6780	4620	11400	247

Facultative subjects

No	Subject Name	Types of term 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:

1. The curriculum is valid for teaching in Bulgarian and English language.
2. Students are equally divided into elective courses after the fourth semester, with higher average success being an advantage in ranking.

Accepted from AU with

Protokol No 10 / 25.04.2016

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Valid for 2016 / 2017 г. academic year.

Head of Department EEME:

/ Assoc. Prof. PhD Kovachev D. /

Dean of Faculty FCA:

/ Assoc. Prof. PhD Nikolov N. /