



## CURRICULUM

Professional orientation: **Communications and Computer Engineering**

Program: **Information and Communication Technologies**

Professional qualification: **Telecommunication Technologies Engineer**

Educational and qualifical 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			60	135	195	7
2	Introduction to the Speciality		1			15		30		45	135	180	6
3	Materials in Electrical Engineering	1				30		30		60	120	180	6
4	Programming Fundamentals		1			15	15	30		60	120	180	6
5	English, part 1				1		30			30	60	90	3
6	Practical Training, part 1				1						30	30	1
7	Elective Subject				1						30	30	1
7a	Specialized Sport Activities, part 1				1						30	30	1
7b	Sport and Social Adaptation, part 1				1						30	30	1
<b>Total for the 1 semester:</b>		<b>2</b>	<b>2</b>		<b>3</b>	<b>75</b>	<b>90</b>	<b>90</b>		<b>255</b>	<b>630</b>	<b>885</b>	<b>30</b>
8	Mathematics, part 2	2				30	30			60	105	165	6
9	Circuit and Field Theory	2				30		30		60	135	195	7
10	Information and Signals Theory	2				30		30		60	135	195	7
11	Electrical Measurements		2			30		30		60	90	150	5
12	English, part 2		2				30			30	60	90	3
13	Practical Training, part 2				2						30	30	1
14	Elective Subject				2						30	30	1
14a	Specialized Sport Activities, part 2				2						30	30	1
14b	Sport and Social Adaptation, part 2				2						30	30	1
<b>Total for the 2 semester:</b>		<b>3</b>	<b>2</b>		<b>2</b>	<b>120</b>	<b>60</b>	<b>90</b>		<b>270</b>	<b>585</b>	<b>855</b>	<b>30</b>
15	Analog Circuits	3				30		30		60	150	210	8
16	Computer Aided Modelling in Telecommunication Systems	3				30		30		60	135	195	7
17	Communication Equipment Design and Reliability		3			30		30		60	135	195	7
18	Computer Communications and Internet Technologies		3			30		30		60	135	195	7
19	Elective Subject				3						30	30	1
19a	Specialized Sport Activities, part 3				3						30	30	1
19b	Sports Management, part 1				3						30	30	1
<b>Total for the 3 semester:</b>		<b>2</b>	<b>2</b>		<b>1</b>	<b>120</b>		<b>120</b>		<b>240</b>	<b>585</b>	<b>825</b>	<b>30</b>
20	Digital Circuits Design	4				30		30		60	120	180	6

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	Information Encryption and Compression	4				30		30		60	120	180	6
22	Communication Circuits	4				30		30		60	120	180	6
23	Radio Waves and Radio Communication Lines	4				30		30		60	120	180	6
24	Specialized Computer Power Supplies		4			30		30		60	120	180	6
25	Elective Subject				4						30	30	1
25a	Specialized Sport Activities, part 4				4						30	30	1
25b	Sports Management, part 2				4						30	30	1
<b>Total for the 4 semester:</b>		<b>4</b>	<b>1</b>		<b>1</b>	<b>150</b>		<b>150</b>		<b>300</b>	<b>630</b>	<b>930</b>	<b>31</b>
26	Antennas and Microwave Devices in Telecommunications	5				30		15		45	135	180	6
27	Microprocessor Systems	5				30		30		60	120	180	6
28	Data Acquisition Systems	5				15		30		45	135	180	6
29	Information Networks and Terminals	5				30		30		60	120	180	6
30	Elective Subject		5			30		30		60	120	180	6
30a	Android-Multimedia Application		5			30		30		60	120	180	6
30b	Labview Design		5			30		30		60	120	180	6
<b>Total for the 5 semester:</b>		<b>4</b>	<b>1</b>			<b>135</b>		<b>135</b>		<b>270</b>	<b>630</b>	<b>900</b>	<b>30</b>
31	Radio Communications	6				30		30		60	120	180	6
32	Telecommunication Networks	6				30		30		60	120	180	6
33	Video Technologies	6				30		30		60	120	180	6
34	Optoelectronics and Optical Communications		6			30		15		45	105	150	5
35	Switching in Communication Networks	6				30		30		60	120	180	6
36	Elective Subject			6					30	30	30	60	2
36a	Video Technologies, project			6					30	30	30	60	2
36b	Telecommunication Networks, project			6					30	30	30	60	2
36c	Radio Communications, project			6					30	30	30	60	2
36d	Antennas and Microwave Devices in Telecommunications, project			6					30	30	30	60	2
37	Specialized Practice				6						90	90	3
<b>Total for the 6 semester:</b>		<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>150</b>		<b>135</b>	<b>30</b>	<b>315</b>	<b>705</b>	<b>1020</b>	<b>34</b>
38	Digital Signal Processing	7				30		30		60	120	180	6
39	Audio Systems	7				30		30		60	120	180	6
40	Digital Transmission Systems		7			30		30		60	120	180	6
41	Mobile Communication Systems	7				30		30		60	120	180	6
42	Satellite Communications		7			30		30		60	120	180	6
43	Elective Subject			7					30	30	30	60	2
43a	Satellite Communications, project			7					30	30	30	60	2
43b	Digital Transmission Systems, project			7					30	30	30	60	2
43c	Optoelectronics and Optical Communications, project			7					30	30	30	60	2
43d	Mobile Communication Systems, project			7					30	30	30	60	2
<b>Total for the 7 semester:</b>		<b>3</b>	<b>2</b>	<b>1</b>		<b>150</b>		<b>150</b>	<b>30</b>	<b>330</b>	<b>630</b>	<b>960</b>	<b>32</b>
44	Computer Communications	8				30		30		60	90	150	5
45	Computer Networks and Information Security	8				30		30		60	90	150	5
46	Technical Safety				8	15		15		30	60	90	3
47	Elective Subject		8			30		30		60	90	150	5
47a	Radionavigation and Radiolocation		8			30		30		60	90	150	5
47b	Electromagnetic Compatibility in Telecommunications		8			30		30		60	90	150	5
48	Elective Subject		8			30		30		60	90	150	5

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
48a	Video Systems and Computer Animation		8			30		30		60	90	150	5
48b	Fiber Optic Cable Lines and Systems		8			30		30		60	90	150	5
<b>Total for the 8 semester:</b>		<b>2</b>	<b>2</b>		<b>1</b>	<b>135</b>		<b>135</b>		<b>270</b>	<b>420</b>	<b>690</b>	<b>23</b>
<b>Total for all courses of education:</b>		<b>24</b>	<b>13</b>	<b>2</b>	<b>9</b>	<b>1035</b>	<b>150</b>	<b>1005</b>	<b>60</b>	<b>2250</b>	<b>4815</b>	<b>7065</b>	<b>240</b>

### 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		

**Accepted from AU with**

Protocol No 20 / 27.03.2017

**Valid from the 2017 / 2018 academic year.**

**The weekly allocation of the classes is fixed according to the "Structure of the Learning Process" Academic Board adopted for the current academic year.**

Head of Department CET:

/ Assoc. Prof. PhD Kostov N. /

Dean of Faculty FCA:

/ Assoc. Prof. PhD Nikolov N. /