



## CURRICULUM

Professional orientation: **Communications and Computer Engineering**

Program: **Information and Communication Technologies**

Professional qualification: **Telecommunication Technologies 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	Introduction to the Speciality		1			15		30		180	135	315	6
3	Materials in Electrical Engineering	1				30		30		180	120	300	6
4	Programming Fundamentals		1			15	15	30		180	120	300	6
5	English, part 1				1		30			90	60	150	3
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
76	Sport and Social Adaptation, part 1				1						30	30	1
<b>Total for the 1 semestar:</b>		<b>2</b>	<b>2</b>		<b>3</b>	<b>75</b>	<b>90</b>	<b>90</b>		<b>885</b>	<b>630</b>	<b>1515</b>	<b>30</b>
8	Mathematics, part 2	2				30	30			165	105	270	6
9	Circuit and Field Theory	2				30		30		195	135	330	7
10	Information and Signals Theory	2				30		30		195	135	330	7
11	Electrical Measurements		2			30		30		150	90	240	5
12	English, part 2		2				30			90	60	150	3
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
146	Sport and Social Adaptation, part 2				2						30	30	1
<b>Total for the 2 semestar:</b>		<b>3</b>	<b>2</b>		<b>2</b>	<b>120</b>	<b>60</b>	<b>90</b>		<b>855</b>	<b>585</b>	<b>1440</b>	<b>30</b>
15	Analog Circuits	3				30		30		210	150	360	8
16	Computer Aided Modelling in Telecommunication Systems	3				30		30		195	135	330	7
17	Communication Equipment Design and Reliability		3			30		30		195	135	330	7
18	Computer Communications and Internet Technologies		3			30		30		195	135	330	7
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
<b>Total for the 3 semestar:</b>		<b>2</b>	<b>2</b>		<b>1</b>	<b>120</b>		<b>120</b>		<b>825</b>	<b>585</b>	<b>1410</b>	<b>30</b>
20	Digital Circuits Design	4				30		30		180	120	300	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		180	120	300	6
22	Communication Circuits	4				30		30		180	120	300	6
23	Radio Waves and Radio Communication Lines	4				30		30		180	120	300	6
24	Embedded Systems		4			30		30		180	120	300	6
25	Optional Subject				4					30	30	60	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 semestar:</b>		<b>4</b>	<b>1</b>		<b>1</b>	<b>150</b>		<b>150</b>		<b>930</b>	<b>630</b>	<b>1560</b>	<b>31</b>
26	Antennas and Microwave Devices in Telecommunications	5				30		15		180	135	315	6
27	Microprocessor Systems	5				30		30		180	120	300	6
28	Data Acquisition Systems	5				15		30		180	135	315	6
29	Information Networks and Terminals	5				30		30		180	120	300	6
30	Optional Subject		5			30		30		180	120	300	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 semestar:</b>		<b>4</b>	<b>1</b>			<b>135</b>		<b>135</b>		<b>900</b>	<b>630</b>	<b>1530</b>	<b>30</b>
31	Radio Communications	6				30		30		180	120	300	6
32	Telecommunication Networks	6				30		30		180	120	300	6
33	Video Technologies	6				30		30		180	120	300	6
34	Optoelectronics and Optical Communications		6			30		15		150	105	255	5
35	Switching in Communication Networks	6				30		30		180	120	300	6
36	Optional 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	180	3
<b>Total for the 6 semestar:</b>		<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>150</b>		<b>135</b>	<b>30</b>	<b>990</b>	<b>705</b>	<b>1695</b>	<b>34</b>
38	Digital Signal Processing	7				30		30		180	120	300	6
39	Audio Systems	7				30		30		180	120	300	6
40	Digital Transmission Systems		7			30		30		180	120	300	6
41	Mobile Communication Systems	7				30		30		180	120	300	6
42	Satellite Communications		7			30		30		180	120	300	6
43	Optional 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 semestar:</b>		<b>3</b>	<b>2</b>	<b>1</b>		<b>150</b>		<b>150</b>	<b>30</b>	<b>930</b>	<b>630</b>	<b>1560</b>	<b>32</b>
44	Computer Communications	8				30		30		150	90	240	5
45	Computer Networks and Information Security	8				30		30		150	90	240	5
46	Technical Safety				8	15		15		90	60	150	3
47	Optional Subject		8			30		30		150	90	240	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	Optional Subject		8			30		30		150	90	240	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 semestar:</b>		<b>2</b>	<b>2</b>		<b>1</b>	<b>135</b>		<b>135</b>		<b>690</b>	<b>420</b>	<b>1110</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>7005</b>	<b>4815</b>	<b>11820</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**

Protokol No 20 / 27.03.2017

**Valid for 2017 / 2018 г. academic year.**

Head of Department CET:

/ Assoc. Prof. PhD Kostov N. /

Dean of Faculty FCA:

/ Assoc. Prof. PhD Nikolov N. /