



TECHNICAL UNIVERSITY OF VARNA

Ratified by:

Rector:.....

/Prof. Ventsislav Valchev, PhD/

CURRICULUM

Professional orientation: **COMMUNICATIONS AND COMPUTER ENGINEERING**

Educational and qualification degree: **BACHELOR**

Programme: **SOFTWARE AND INTERNET TECHNOLOGIES**

Professional qualification: **COMPUTER ENGINEER**

Form of study: **FULL - TIME**

Term of study: **4 YEARS / 8 SEMESTERS**

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Mathematics, part 1		*			30	45				75	115	190	7
2	Web Design		*			15				30	45	130	175	7
3	Programming Fundamentals	*				30	30			30	90	110	200	8
4	Electronics		*			30				30	60	115	175	7
5	<i>Optional Subject</i>				*									
a	Specialized Sport Activities, part 1											30	30	1
b	Adapted Physical Activity*													
Total for the 1 semester:		1	3	0	1	105	75	0	0	90	270	500	770	30
6	Mathematics, part 2	*				30	30			15	75	165	240	9
7	Algorithms and Data Structures	*				30				30	60	165	225	9
8	Digital Logic	*				30	30				60	140	200	8
9	Foreign Language		*				45				45	45	90	3
10	<i>Optional Subject</i>				*									
a	Specialized Sport Activities, part 2											30	30	1
b	Adapted Physical Activity*					(30)	(15)				(45)	(75)	(120)	(4)
11	Practical Training, part 1				*							30	30	1
Total for the 2 semester:		3	1	0	2	90	105	0	0	45	240	575	815	31
12	Discrete Structures		*			30	30				60	90	150	6
13	Data Bases		*			30				30	60	90	150	6

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
b	Computer Networks and Internet													
c	Software Production Technology													
d	Database Programming													
38	Specialized Practice				*						0	150	150	5
Total for the 6 semester:		3	2	1	1	135	0	30	0	150	315	570	885	34
39	Network Administration	*				30				30	60	90	150	6
40	Language Processors	*				30				30	60	90	150	6
41	Artificial Intelligence		*			30				30	60	90	150	6
42	Programming for Mobile Internet Devices	*				30				30	60	90	150	6
43	<i>Optional Subject</i>		*			30				30	60	90	150	6
a	Internet Information Retrieval													
b	Fundamentals of Cybersecurity													
44	Practical Training, part 3				*							30	30	1
Total for the 7 semester:		3	2	0	1	150	0	0	0	150	300	480	780	31
45	<i>Optional Subject 1</i>	*				30				30	60	115	175	7
46	<i>Optional Subject 2</i>	*				30				30	60	115	175	7
47	<i>Optional Subject 3</i>	*				30				30	60	115	175	7
	<i>Optional Subject:</i>													
1	Office Technologies													
2	Distributed Processing in Internet													
3	Corporate Management													
4	Multimedia Systems and Technologies													
5	Object-Oriented Applications													
6	Information Systems													
7	Cloud Technologies													
8	E-commerce													
9	Team Management													
10	Cryptography and Data Protection													
11	Business Intelligence Systems													
12	Information Management													
13	Renewable Energy Sources - Principles and Software Solutions													
14	Time Management													
15	Functional Programming Languages													
Total for the 8 semester:		3	0	0	0	90	0	0	0	90	180	345	525	21
Totals for the whole course of education		23	13	3	8	1005	240	90	0	915	2250	3935	6185	242

Number	Subject name	Types of term control				Auditorium load						Unsupervised load	Total work hours	ECTS credits
		Examination	Progressive assessment	Course project	Approved	Lectures	Seminars			Laboratories	Total load			
							Seminar exercises	Course project	Course work					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Facultative Subjects														
1	Leadership and Teamwork		7			30	30				60	60	120	4
2	Principles of Law		5			30	30				60	60	120	4
3	Psychology of Stress		5			30	30				60	60	120	4
4	Business and Entrepreneurship		7			30	30				60	60	120	4
5	Creativity and Methods for Generating New Ideas		6			30	30				60	60	120	4

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			

Note:

1. The curriculum is valid for teaching in Bulgarian and English language.
- 2.* The discipline "Adapted Physical Activity" is an alternative to "Specialized Sport Activities", it is studied in the second semester and is intended for students who cannot do sports for health reasons.

Accepted from AU with:

Protocol No 26 / 21.12.2020

Modified with Protocols No: 31 / 29.03.2021; No 62/27.02.2023.

Valid from the 2022/2023 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:

Dean of Faculty:

/ Assoc. Prof. V. Bozhikova, PhD /

/ Assoc. Prof. N. Nikolov, PhD /