



TECHNICAL UNIVERSITY OF VARNA

Ratified by:
Rector.....

/Prof. Rosen Vasilev, PhD/

CURRICULUM

Professional orientation: **COMMUNICATIONS AND COMPUTER ENGINEERING**

Educational and qualification degree: **MASTER**

Programme: **SOFTWARE ENGINEERING**

Professional qualification: **MASTER - ENGINEER**

Mode of study: **FULL - TIME**

Length of study: **1,5 years / 3 semesters**

For holders of educational and qualificational degree "Bachelor" in specialities "Computing", "Software and Internet Technologies" or in specialities of professional orientation 4.6 "Informatics and Computer Science"

Number	Subject Name	Forms of assessment				Weekly auditorium load						Unsupervised load	Whole load of students	ECTS credits
		Exams	Inter-semester Evaluation	Course project	Accepted	Lectures	Seminars			Laboratory Exercises	Total load			
							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Optional Subject 1	*				30			15	30	75	135	210	8
2	Optional Subject 2	*				30			15	30	75	135	210	8
3	Optional Subject 3	*				30				30	60	120	180	7
4	Optional Subject 4	*				30				30	60	120	180	7
5	Optional Subject 5		(*)			(30)				(30)	(60)	(90)	(150)	(5)
	Optional Subjects													
a	Application Programming with C# and Visual Studio.NET													
b	Neural Networks and Applications													
c	Parallel Programming													
d	Parallel Algorithms and Systems													
e	Visual Information Processing													
f	Network Programming													
g	Computer Animation													
h	Android Based Technologies for Mobile Devices													
i	Systems for Computer Algebra													
j	Management Information Systems													
k	Simulation of Physical Processes in 3D Modeling Environment													
Total for the 1 semester:		4	0	0	0	120	0	0	30	120	270	510	780	30
6	Optional Subject 1	*				30			15	30	75	135	210	8
7	Optional Subject 2	*				30				30	60	150	210	8
8	Optional Subject 3	*				30				30	60	120	180	7
9	Optional Subject 4	*				30				30	60	120	180	7
10	Optional Subject 5		(*)			(30)				(30)	(60)	(90)	(150)	(5)

Number	Subject Name	Forms of assessment				Weekly auditorium load						Unsupervised load	Whole load of students	ECTS credits
		Exams	Inter-semester Evaluation	Course project	Accepted	Lectures	Seminars			Laboratory Exercises	Total load			
							Seminar Exercises	Course project	Assignment					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Optional Subjects														
a	Internet for Mobile Devices													
b	Microsoft Technologies for Design and Administration of Distributed Data Bases													
c	Distributed Applications with C # and Visual Studio.Net													
d	Distributed and Network Operating Systems													
e	Software Design Patterns													
f	Geographic Information Systems													
g	Expert Systems													
h	Mobile Software Technologies													
i	Machine Learning													
j	Virtual 3D Reality Interfaces													
k	Environment and Devices for Virtual Reality and 3D Modeling													
l	Game Development													
Total for the 2 semester:		4	0	0	0	120	0	0	15	120	255	525	780	30
Totals for the whole course of education														
		8	0	0	0	240	0	0	45	240	525	1035	1560	60
Facultative Subjects														

Types of graduation	Semester	Unsupervised load	ECTS credits
Preparation of Diploma Thesis	3	450	15
Defense of Diploma Thesis			

Note:

1. The curriculum is valid for the training in Bulgarian and English
2. In semester 1 and 2 are taught in 4 or 5 subjects in a decision of the department council.

Approved by the Academic Board of TU-Varna:

Protocol № 20 / 27.03.2017

Modified with Protocols:

Valid from 2017/2018 academic year

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

Head of Department:

/Assoc. Prof. V. Bozhikova, PhD/

Dean of Faculty:

/Assoc. Prof. N. Nikolov, PhD/