

Burgas State University "Prof. Dr. Assen Zlatarov"

Approved!
Rector:



Higher Education Curriculum for the studies of Artificial Intelligence and Virtual Reality and the acquisition of the academic degree of Master of Science

Higher education area: 5. Technical Sciences
Professional field: 5.3 Communication and computer technics
Professional qualification: Master Engineer
2 semesters after Bachelor degree in 5.3. Communication and computer technics

Duration: 1 year
Form of education: Part-time

Accepted at FS on
Accepted at AC on

Protocol № 16/18.07.2020
Protocol №

I. TIMETABLE

Year	Curricular activity	Exam sessions	Practice:			State exam	Holidays	Total
			Studies	Studies in Industry	Specialization			
	weeks	weeks	weeks	weeks	weeks	weeks	weeks	weeks
I.	5	15			2.00		15	37
II.								
III.								

II. CURRICULUM PARAMETERS

1.	Curricular activity, hrs.	(C)	418	%
	Lectures	(L)	218	52.2
	Seminar classes	(S)	38	9.1
	Practical classes	(P)	162	38.8
	Physical Education and Sports		0	hours

Practice		count	hours
Studies	(st)	0	0
Studies in Industry	(si)	0	0
Specialization	(sp)	1	30

2.	Subjects	count	hours	%
	Compulsory (c)	13	349	80.6
	Selectable (s)	3	69	15.9
	Facultative (f)	1	15	3.5

Extracurricular activity, hrs. (E) 1611 hrs.
Curricular/Extracurricular ratio (C/E) = 25.9 %

	count	hours
Course projects (cp)	1	16
Course works (cw)	0	0

3.	Assessment (AM):	Exams (e) 18	In-class assessment (i) 0	Participation signature (p) 0
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4.	Form of graduation:	Master Thesis
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5.	Schedule of Classes: Approved annually by the Academic Council.
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III. PLAN

First semester			L	S		P		C	E	C/E	AM	Credits
No	Subject	Type	hrs	type	hrs	type	hrs.	hrs.	hrs.	%		
1.	Programming with Microsoft .NET Framework	c	15	cp	8		8	31	90	34.4	e	4
2.	Internet Databases	c	15				15	30	90	33.3	e	4
3.	UNIX/LINUX	c	15				15	30	120	25.0	e	5
4.	Selectable subject from List 2	s	15				8	23	40	57.5	e	2
5.	Software Technologies	c	8				15	23	100	23.0	e	4
6.	3D Design	c	15				8	23	70	32.9	e	3
7.	Selectable subject from List 1	s	15				8	23	70	32.9	e	3
8.	Systems with Intelligent Behaviour	c	15				8	23	40	57.5	e	2
9.	Systems with Intelligent Behaviour	c	15				8	23	40	57.5	e	3
10.	Fuzzy Sets	f									e	
Total:			128	8		93		229	660	34.7		30

Second semester			L	S		P		C	E	C/E	AM	Credits
No	Subject	Type	hrs.	type	hrs	type	hrs.	hrs.	hrs.	%		
1.	Pre-Thesis Practice	c		sp	30			30	180	16.7	e	2
2.	Network Administration	c	15				15	30	90	33.3	e	4
3.	Augmented Reality	c	15				8	23	37	62.2	e	2
4.	Selectable subject from List 3	s	15				8	23	37	62.2	e	2
5.	Neural Networks	c	15				15	30	30	100.0	e	2
6.	Computer Vision	c	15				8	23	37	62.2	e	2
7.	Virtual Reality	c	15				15	30	90	33.3	e	4
8.	Master Thesis								450		e	15
Total:			90	30		69		189	951	19.9		33

Lists of selectable and facultative subjects

List 1	
1.	Data Management
2.	Algorithms for data mining
3.	
4.	
5.	

List 2	
1.	Data mining software
2.	Intelligent agents
3.	
4.	
5.	

List 3	
1.	Business information systems
2.	Java-based technologies
3.	
4.	
5.	

List 4	
1.	Publishing System TeX
2.	
3.	
4.	
5.	

Note 1. The facultative subject from List 4 is being studied with a schedule of 15 hours as 2 credits are awarded. The total workload of 30 hours for a discipline is outside the maximum work schedule for acquiring a professional qualification. The training in the discipline ends with an in-class assessment.

Accepted at AC Protocol № 15/28.07.2020

Accepted at AC Protocol No 64/23.07.2026