STUDY CURRICULUM FOR 2023/2024 ENROLLMENT Field of study: COMPUTER SCIENCE Major: Internet technologies and computer graphics

level of acquired education: first-cycle programme educational profile: practical mode of study: full-time programme

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Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/p ractical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses		
				SEMI	ESTER	Ι							
1	Foreign language	graded credit	30			30			2		+		
2	Physical education	graded credit	30		30				0				
3	Social competence/Interpersonal communication	graded credit	45	15	30				3		+		
4	Mathematical analysis	exam	60	30	30				5				
5	Mathematics for IT specialists	graded credit	45	15	30				3				
6	Basics of computer science and computer systems architecture	exam	45	15		30			5	+			
7	Basics of programming	graded credit	60	30		30			4	+			
8	Computer graphics techniques	graded credit	45	15		30			3	+			
9	Internet technologies	exam	45	15		30			5	+			
10	OSH training	pass	4	4					0				
11	Library training	pass	2		2				0				
	Σ	411	139	122	150	0	0	30	17	5			
				SEMESTER II									
12	Foreign language	graded credit	30			30			2		+		
13	Physical Education	graded credit	30		30				0				
14	Social and professional issues in computing	graded credit	30	15		15			2	+			
15	Mathematics	exam	60	30	30				5				
16	Physics	graded credit	60	15	15	30			4	+			
17	Electronic measurement	graded credit	45	15		30			3	+			
18	Basics of object-oriented programming	exam	45	15		30			5	+			
19	Computer networks	graded credit	60	30		30			4	+			
20	Computer graphics	exam	45	15		30			5	+			
	Σ		405	135	75	195	0	0	30	23	2		
				SEME	STER	III							
21	Foreign language	graded credit	30			30			2		+		
22	Probability calculus and statistics	graded credit	45	15		30			3	+			
23	Algorithms and data structures	exam	60	30		30			5	+			
24	Signal analysis and processing/Digital Signal Processing	graded credit	45	15		30			3	+	+		
25	Basics of robotics/ Basics of automation	graded credit	45	15		30			4	+	+		
26	Digital techniques and technologies	graded credit	45	15		30			2	+			
27	Object-oriented programming	graded credit	45	15		30			3	+			
28	Operating systems	exam	45	15		30			5	+			
29	User interface design	graded credit	45	15		30			3	+	+		
	Σ	405	135	0	270	0	0	30	28	12			

Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/p ractical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses		
	SEMESTER IV												
30	Foreign language	exam	30			30			2		+		
31	Basics of electrical engineering and electronics	graded credit	45	15		30			2	+			
32	Basics of databases	graded credit	45	15		30			2	+			
33	Introduction to web applications	graded credit	45	15		30			2	+			
34	Field-related internship	graded credit	480					480	18	+	+		
35	Design graphics	exam	45	15		30			4	+	+		
	Σ		690	60	0	150	0	480	30	28	24		
				SEME	ESTER	V							
36	Numerical methods	graded credit	45	15		30			3	+			
37	Modelling and computer simulation	graded credit	30	15		15			2	+			
38	Computer architecture	exam	60	30		30			5	+			
39	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+		
40	IT project / IT project implementation	graded credit	45				45		3	+	+		
41	Databases	graded credit	45	15		30			3	+			
42	Multimedia techniques	graded credit	30	15		15			2	+			
43	Diploma seminar	graded credit	15		15				1	+	+		
44	Web programming	exam	45	15		30			5	+	+		
45	Content management systems	graded credit	45	15		30			3	+	+		
	Σ	405	135	15	180	75	0	30	30	15			
				SEME	STER	VI							
46	Cyber security	graded credit	45	15		30			2	+			
47	Software engineering	exam	60	30		30			4	+			
48	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+		
49	Diploma seminar	graded credit	15		15				1	+	+		
50	Field-related internship	graded credit	480					480	18	+	+		
51	Advanced web programming	exam	45	15		30			3	+	+		
	Σ		690	75	15	120	0	480	30	30	24		
				SEME	STER V	VII							
52	Software testing	graded credit	30	15		15			2	+			
53	Embedded systems	exam	45	15		30			5	+			
54	Internet of things	graded credit	45	15		30			3	+			
55	Diploma seminar	graded credit	30		30				12	+	+		
56	Three-dimensional computer graphics	graded credit	45	15			30		3	+	+		
57	Image processing	exam	45	15			30		5	+	+		
	Σ		240	75	30	75	60	0	30	30	20		
			00.11	754	257	1140	135	960		186	102		
	IN TOTAL DURING STUDIES		3246	23,23%		76,7	7%		210	88,57%	48,57%		

STUDY CURRICULUM FOR 2023/2024 ENROLLMENT Field of study: Computer Science Major: Computer networks and cyber security

level of acquired education: first-cycle programme educational profile: practical mode of study: full-time programme

Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/ practical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses	
				SEN	MESTE	IR I				•		
1	Foreign language	graded credit	30			30			2		+	
2	Physical education	graded credit	30		30				0			
3	Social competence/Interpersonal communication	graded credit	45	15	30				3		+	
4	Mathematical analysis	exam	60	30	30				5			
5	Mathematics for IT specialists	graded credit	45	15	30				3			
6	Basics of computer science and computer systems architecture	exam	45	15		30			5	+		
7	Basics of programming	graded credit	60	30		30			4	+		
8	Computer graphics techniques	graded credit	45	15		30			3	+		
9	Internet technologies	exam	45	15		30			5	+		
10	OSH training	pass	4	4					0			
11	Library training	pass	2		2				0			
	Σ	411	139	122	150	0	0	30	17	5		
SEMESTER II												
12	Foreign language	graded credit	30			30			2		+	
13	Physical education	graded credit	30		30				0			
14	Social and professional aspects of computing	graded credit	30	15		15			2	+		
15	Mathematics	exam	60	30	30				5			
16	Physics	graded credit	60	15	15	30			4	+		
17	Electronic measurement	graded credit	45	15		30			3	+		
18	Basics of object-oriented programming	exam	45	15		30			5	+		
19	Computer networks	graded credit	60	30		30			4	+		
20	Computer graphics	exam	45	15		30			5	+		
	Σ		405	135	75	195	0	0	30	23	2	
				SEM	IESTEI	R III						
21	Foreign language	graded credit	30			30			2		+	
22	Probability calculus and statistics	graded credit	45	15		30			3	+		
23	Algorithms and data structures	exam	60	30		30			5	+		
24	Signal analysis and processing/Digital Signal Processing	graded credit	45	15		30			3	+	+	
25	Basics of robotics/ Basics of automation	graded credit	45	15		30			4	+	+	
26	Digital techniques and technologies	graded credit	45	15		30			2	+		
27	Object-oriented programming	graded credit	45	15		30			3	+		
28	Operating systems	exam	45	15		30			5	+		
29	Network operating systems	graded credit	45	15		30			3	+	+	
	Σ	405	135	0	270	0	0	30	28	12		

Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/ practical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses
				SEM	IESTEI	R IV					
30	Foreign language	exam	30			30			2		+
31	Basics of electrical and electronic engineering	graded credit	45	15		30			2	+	
32	Basics of databases	graded credit	45	15		30			2	+	
33	Introduction to web applications	graded credit	45	15		30			2	+	
34	Field-related internship	graded credit	480					480	18	+	+
35	Cryptography	exam	45	15		30			4	+	+
	Σ		690	60	0	150	0	480	30	28	24
				SEM	1ESTE	R V					
36	Numerical methods	graded credit	45	15		30			3	+	
37	Modelling and computer simulation	graded credit	30	15		15			2	+	
38	Computer architecture	exam	60	30		30			5	+	
39	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+
40	IT project/ It project implementation	graded credit	45				45		3	+	+
41	Databases	graded credit	45	15		30			3	+	
42	Multimedia techniques	graded credit	30	15		15			2	+	
43	Diploma seminar	graded credit	15		15				1	+	+
44	Design and implementation of computer networks	exam	45	15		30			5	+	+
45	Security of web and mobile applications	graded credit	45	15		30			3	+	+
	Σ			135	15	180	75	0	30	30	15
				SEM	IESTEI	R VI					
46	Cyber security	graded credit	45	15		30			2	+	
47	Software engineering	exam	60	30		30			4	+	
48	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+
49	Diploma seminar	graded credit	15		15				1	+	+
50	Field-related internship	graded credit	480					480	18	+	+
51	Computer forensics	exam	45	15		30			3	+	+
	Σ		690	75	15	120	0	480	30	30	24
				SEM	ESTEF	R VII					
52	Software testing	graded credit	30	15		15			2	+	
53	Embedded systems	exam	45	15		30			5	+	
54	Internet of things	graded credit	45	15		30			3	+	
55	Diploma seminar	graded credit	30		30				12	+	+
56	Hardware aspects of cyber security	graded credit	45	15			30		3	+	+
57	Security in the cloud	exam	45	15			30		5	+	+
	Σ		240	75	30	75	60	0	30	30	20
	IN TOTAL DURING STUDIES		3246	754	257	1140	135	960	210	186	102
	IN 101AL DUKING STUDIES			23,23%		76,7	7%		210	88,57%	48,57%

STUDY CURRICULUM FOR 2023/2024 ENROLLMENT Field of study: COMPUTER SCIENCE Major: Programming and mobile technologies

level of acquired education: first-cycle programme educational profile: practical mode of study: full-time programme

Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/ practical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses	ECTS for distance learning courses		
	SEMESTER I													
1	Foreign language	graded	30			30			2		+			
2	Physical education	graded	30		30				0					
3	Social competence/Interpersonal	graded	45	15	30				3		+			
4	Mathematical analysis	exam	60	30	30				5					
5	Mathematics for IT specialists	graded credit	45	15	30				3					
6	Basics of computer science and computer systems architecture	exam	45	15		30			5	+				
7	Basics of programming	graded credit	60	30		30			4	+				
8	Computer graphics techniques	graded credit	45	15		30			3	+				
9	Internet technologies	exam	45	15		30			5	+				
10	OSH training	pass	4	4					0					
11	Library training	pass	2		2				0					
	Σ		411	139	122	150	0	0	30	17	5	0		
SEMESTER II														
12	Foreign language	graded credit	30			30			2		+			
13	Physical education	graded	30		30				0					
14	Social and professional aspects of computing	graded credit	30	15		15			2	+				
15	Mathematics	exam	60	30	30				5					
16	Physics	graded	60	15	15	30			4	+				
17	Electronic measurement	graded credit	45	15		30			3	+				
18	Basics of object-oriented programming	exam	45	15		30			5	+				
19	Computer networks	graded credit	60	30		30			4	+				
20	Computer graphics	exam	45	15		30			5	+				
	Σ		405	135	75	195	0	0	30	23	2	0		
				SEME	STER	III								
21	Foreign language	graded credit	30			30			2		+			
22	Probability calculus and statistics	graded credit	45	15		30			3	+				
23	Algorithms and data structures	exam	60	30		30			5	+				
24	Signal analysis and processing/Digital Signal Processing	graded credit	45	15		30			3	+	+			
25	Basics of robotics/ Basics of automation	graded credit	45	15		30			4	+	+			
26	Digital techniques and technologies	graded credit	45	15		30			2	+				
27	Object-oriented programming	graded credit	45	15		30			3	+				
28	Operating systems	exam	45	15		30			5	+				
29	Design of mobile applications in Android	graded credit	45	15		30			3	+	+			
	Σ	405	135	0	270	0	0	30	28	12	0			

Lp.	Course	Form of credit	Number of hours	lecture	classes	lab classes/ foreign language course	project/ practical classes	internship	ECTS	ECTS for practical courses	ECTS for elective courses	ECTS for distance learning courses		
	SEMESTER IV													
30	Foreign language	exam	30			30			2		+			
31	Basics of electrical engineering and electronics	graded credit	45	15		30			2	+				
32	Basics of databases	graded credit	45	15		30			2	+				
33	Introduction to web applications	graded credit	45	15		30			2	+				
34	Field-related internship	graded credit	480					480	18	+	+			
35	Advanced object-oriented programming	exam	45	15		30			4	+	+			
	Σ		690	60	0	150	0	480	30	28	24	0		
	SEMESTER V													
36	Numerical methods	graded credit	45	15		30			3	+				
37	Modelling and computer simulation	graded credit	30	15		15			2	+				
38	Computer architecture	exam	60	30		30			5	+				
39	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+			
40	IT project / IT project implementation	graded credit	45				45		3	+	+			
41	Databases	graded credit	45	15		30			3	+				
42	Multimedia techniques	graded credit	30	15		15			2	+				
43	Diploma seminar	graded credit	15		15				1	+	+			
44	Microcontroller programming	exam	45	15		30			5	+	+			
45	Design of web applications for mobile devices	graded credit	45	15		30			3	+	+			
	Σ			135	15	180	75	0	30	30	15	0		
				SEME	STER	VI								
46	Cyber security	graded credit	45	15		30			2	+				
47	Software engineering	exam	60	30		30			4	+				
48	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+			
49	Diploma seminar	graded credit	15		15				1	+	+			
50	Field-related internship	graded credit	480					480	18	+	+			
51	Programming of mobile applications for iOS	exam	45	15		30			3	+	+			
	Σ		690	75	15	120	0	480	30	30	24	0		
				SEME	STER	VII								
52	Software testing	graded credit	30	15		15			2	+				
53	Embedded systems	exam	45	15		30			5	+				
54	Internet of things	graded credit	45	15		30			3	+				
55	Diploma seminar	graded credit	30		30				12	+	+			
56	Mobile technologies in computer networks	graded credit	45	15			30		3	+	+			
57	Web services programming	exam	45	15			30		5	+	+			
	Σ		240	75	30	75	60	0	30	30	20	0		
	IN TOTAL DIDING OTUDIES		2216	754	257	1140	135	960	210	186	102	0		
	IN TOTAL DURING STUDIES		5240	23,23%		76,7	7%		210	88,57%	48,57%	0,00%		