

STUDY CURRICULUM FOR 2022/2023 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

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	ECTS for distance learning courses
SEMESTER 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	60	30	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			426	154	122	150	0	0	30	17	5	3
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			3	+		
17	Ecological engineering/Renewable energy sources	graded credit	45	15		30			2	+	+	
18	Electronic measurement	graded credit	45	15		30			3	+		
19	Basics of object-oriented programming	exam	45	15		30			5	+		
20	Computer networks	graded credit	60	30		30			3	+		
21	Computer graphics	exam	45	15		30			5	+		
Σ			450	150	75	225	0	0	30	23	4	0
SEMESTER III												
22	Foreign language	graded credit	30			30			2		+	
23	Probability calculus and statistics	graded credit	45	15		30			3	+		
24	Algorithms and data structures	exam	60	30		30			5	+		
25	Signal analysis and processing/Digital Signal Processing	exam	60	15		30	15		5	+	+	
26	Basics of automation	graded credit	45	15		30			3	+		
27	Digital techniques and technologies	graded credit	45	15		30			3	+		
28	Object-oriented programming	graded credit	45	15		30			3	+		
29	Operating systems	graded credit	45	15		30			3	+		
30	User interface design	graded credit	45	15		30			3	+	+	
Σ			420	135	0	270	15	0	30	28	10	0

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	ECTS for distance learning courses
SEMESTER IV												
31	Foreign language	exam	30			30			2		+	
32	Basics of electrical engineering and electronics	graded credit	45	15		30			2	+		
33	Basics of databases	graded credit	45	15		30			2	+		
34	Introduction to web applications	graded credit	45	15		30			2	+		
35	Field-related internship	graded credit	480					480	18	+		
36	Design graphics	exam	45	15		30			4	+	+	
Σ			690	60	0	150	0	480	30	28	6	0
SEMESTER V												
37	Numerical methods	graded credit	45	15		30			3	+		
38	Modelling and computer simulation	graded credit	30	15		15			2	+		
39	Computer architecture	exam	60	30		30			5	+		
40	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+	
41	IT project / IT project implementation	graded credit	45				45		3	+	+	
42	Databases	graded credit	45	15		30			3	+		
43	Multimedia techniques	graded credit	30	15		15			2	+		
44	Diploma seminar	graded credit	15		15				1	+	+	+
45	Web programming	exam	45	15		30			5	+	+	
46	Content management systems	graded credit	45	15		30			3	+	+	
Σ			405	135	15	180	75	0	30	30	15	1
SEMESTER VI												
47	Cyber security	graded credit	45	15		30			2	+		
48	Software engineering	exam	60	30		30			4	+		
49	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+	
50	Diploma seminar	graded credit	30		30				1	+	+	+
51	Field-related internship	graded credit	480					480	18	+		
52	Advanced web programming	exam	45	15		30			3	+		
Σ			705	75	30	120	0	480	30	30	3	1
SEMESTER VII												
53	Software testing	graded credit	30	15		15			2	+		
54	Embedded systems	exam	45	15		30			5	+		
55	Internet of things	graded credit	45	15		30			3	+		
56	Diploma seminar	graded credit	30		30				12	+	+	+
57	Three-dimensional computer graphics	graded credit	45	15			30		3	+	+	
58	Image processing	exam	45	15			30		5	+	+	
Σ			240	75	30	75	60	0	30	30	20	12
IN TOTAL DURING STUDIES			3336	784	272	1170	150	960	210	186	63	17
				23,50%	76,50%					88,57%	30,00%	8,10%

STUDY CURRICULUM FOR 2022/2023 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	ECTS for distance learning courses
SEMESTER 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	60	30	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			426	154	122	150	0	0	30	17	5	3
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			3	+		
17	Ecological engineering/Renewable energy sources	graded credit	45	15		30			2	+	+	
18	Electronic measurement	graded credit	45	15		30			3	+		
19	Basics of object-oriented programming	exam	45	15		30			5	+		
20	Computer networks	graded credit	60	30		30			3	+		
21	Computer graphics	exam	45	15		30			5	+		
Σ			450	150	75	225	0	0	30	23	4	0
SEMESTER III												
22	Foreign language	graded credit	30			30			2		+	
23	Probability calculus and statistics	graded credit	45	15		30			3	+		
24	Algorithms and data structures	exam	60	30		30			5	+		
25	Signal analysis and processing/Digital Signal Processing	exam	60	15		30	15		5	+	+	
26	Basics of automation	graded credit	45	15		30			3	+		
27	Digital techniques and technologies	graded credit	45	15		30			3	+		
28	Object-oriented programming	graded credit	45	15		30			3	+		
29	Operating systems	graded credit	45	15		30			3	+		
30	Network operating systems	graded credit	45	15		30			3	+	+	
Σ			420	135	0	270	15	0	30	28	10	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												
31	Foreign language	exam	30			30			2		+	
32	Basics of electrical and electronic engineering	graded credit	45	15		30			2	+		
33	Basics of databases	graded credit	45	15		30			2	+		
34	Introduction to web applications	graded credit	45	15		30			2	+		
35	Field-related internship	graded credit	480					480	18	+		
36	Cryptography	exam	45	15		30			4	+	+	
Σ			690	60	0	150	0	480	30	28	6	0
SEMESTER V												
37	Numerical methods	graded credit	45	15		30			3	+		
38	Modelling and computer simulation	graded credit	30	15		15			2	+		
39	Computer architecture	exam	60	30		30			5	+		
40	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+	
41	IT project/ It project implementation	graded credit	45				45		3	+	+	
42	Databases	graded credit	45	15		30			3	+		
43	Multimedia techniques	graded credit	30	15		15			2	+		
44	Diploma seminar	graded credit	15		15				1	+	+	+
45	Design and implementation of computer networks	exam	45	15		30			5	+	+	
46	Security of web and mobile applications	graded credit	45	15		30			3	+	+	
Σ			405	135	15	180	75	0	30	30	15	1
SEMESTER VI												
47	Cyber security	graded credit	45	15		30			2	+		
48	Software engineering	exam	60	30		30			4	+		
49	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+	
50	Diploma seminar	graded credit	30		30				1	+	+	+
51	Field-related internship	graded credit	480					480	18	+		
52	Computer forensics	exam	45	15		30			3	+		
Σ			705	75	30	120	0	480	30	30	3	1
SEMESTER VII												
53	Software testing	graded credit	30	15		15			2	+		
54	Embedded systems	exam	45	15		30			5	+		
55	Internet of things	graded credit	45	15		30			3	+		
56	Diploma seminar	graded credit	30		30				12	+	+	+
57	Hardware aspects of cyber security	graded credit	45	15			30		3	+	+	
58	Security in the cloud	exam	45	15			30		5	+	+	
Σ			240	75	30	75	60	0	30	30	20	12
IN TOTAL DURING STUDIES			3336	784	272	1170	150	960	210	186	63	17
				23,50%	76,50%					88,57%	30,00%	8,10%

STUDY CURRICULUM FOR 2022/2023 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 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	60	30	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			426	154	122	150	0	0	30	17	5	3
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			3	+		
17	Ecological engineering/Renewable energy sources	graded credit	45	15		30			2	+	+	
18	Electronic measurement	graded credit	45	15		30			3	+		
19	Basics of object-oriented programming	exam	45	15		30			5	+		
20	Computer networks	graded credit	60	30		30			3	+		
21	Computer graphics	exam	45	15		30			5	+		
Σ			450	150	75	225	0	0	30	23	4	0
SEMESTER III												
22	Foreign language	graded credit	30			30			2		+	
23	Probability calculus and statistics	graded credit	45	15		30			3	+		
24	Algorithms and data structures	exam	60	30		30			5	+		
25	Signal analysis and processing/Digital Signal Processing	exam	60	15		30	15		5	+	+	
26	Basics of automation	graded credit	45	15		30			3	+		
27	Digital techniques and technologies	graded credit	45	15		30			3	+		
28	Object-oriented programming	graded credit	45	15		30			3	+		
29	Operating systems	graded credit	45	15		30			3	+		
30	Design of mobile applications in Android	graded credit	45	15		30			3	+	+	
Σ			420	135	0	270	15	0	30	28	10	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												
31	Foreign language	exam	30			30			2		+	
32	Basics of electrical engineering and electronics	graded credit	45	15		30			2	+		
33	Basics of databases	graded credit	45	15		30			2	+		
34	Introduction to web applications	graded credit	45	15		30			2	+		
35	Field-related internship	graded credit	480					480	18	+		
36	Advanced object-oriented programming	exam	45	15		30			4	+	+	
Σ			690	60	0	150	0	480	30	28	6	0
SEMESTER V												
37	Numerical methods	graded credit	45	15		30			3	+		
38	Modelling and computer simulation	graded credit	30	15		15			2	+		
39	Computer architecture	exam	60	30		30			5	+		
40	Basics of telecommunications/ Basics of ICT	graded credit	45	15			30		3	+	+	
41	IT project / IT project implementation	graded credit	45				45		3	+	+	
42	Databases	graded credit	45	15		30			3	+		
43	Multimedia techniques	graded credit	30	15		15			2	+		
44	Diploma seminar	graded credit	15		15				1	+	+	+
45	Microcontroller programming	exam	45	15		30			5	+	+	
46	Design of web applications for mobile devices	graded credit	45	15		30			3	+	+	
Σ			405	135	15	180	75	0	30	30	15	1
SEMESTER VI												
47	Cyber security	graded credit	45	15		30			2	+		
48	Software engineering	exam	60	30		30			4	+		
49	Object-oriented design of information systems / Neural networks	graded credit	45	15		30			2	+	+	
50	Diploma seminar	graded credit	30		30				1	+	+	+
51	Field-related internship	graded credit	480					480	18	+		
52	Design of mobile applications for iOS	exam	45	15		30			3	+		
Σ			705	75	30	120	0	480	30	30	3	1
SEMESTER VII												
53	Software testing	graded credit	30	15		15			2	+		
54	Embedded systems	exam	45	15		30			5	+		
55	Internet of things	graded credit	45	15		30			3	+		
56	Diploma seminar	graded credit	30		30				12	+	+	+
57	Mobile technologies in computer networks	graded credit	45	15			30		3	+	+	
58	Web services programming	exam	45	15			30		5	+	+	
Σ			240	75	30	75	60	0	30	30	20	12
IN TOTAL DURING STUDIES			3336	784	272	1170	150	960	210	186	63	17
				23,50%	76,50%					88,57%	30,00%	8,10%