



Degree Structure

#	Activity Type	ECTS cr
1.	General studies	25
	Basic studies	14
	Elective studies	11
2.	Professional studies	26
	Basic studies	13
	Elective studies	13
3.	Practice and Scientific Research	54
4.	Final Certification	15
	Total	120

Courses

#	Course Name	Period (semester)	ECTS cr
General Basic Studies (14 ECTS cr)			
1.	Modern philosophy and methodology of science	1	2
2.	English language	1, 2	4
3.	Mathematical foundation of information security	1	3
4.	Algorithmic foundation of multimedia technologies	3	2
5.	Java programming	1	3
General Elective Studies (total 11 ECTS cr)			
6.	Mobile programming	3	4
7.	Higher education pedagogy	2	2
8.	Integration of academic science and education	2	2
9.	Markup languages	1	3
10.	XML technologies	1	3
11.	Advanced methods of software development	2	2
12.	Advanced methods of software engineering	2	2
Professional Basic Studies (26 ECTS cr)			
13.	Information technology analysis	3	2
14.	Object-oriented CASE technologies	1	2
15.	Object databases	3	2
16.	Distributed object technologies	2	3
17.	Distributed and parallel programming	2, 3	4
Professional Elective Studies (total 13 ECTS cr)			
18.	Seminar on advanced database technologies	2	2
19.	Corporate web application development on Java platform	2	2
20.	Parallel DBMS development	3	2
21.	Advanced technologies for DBMS development	1, 2	4
22.	Enterprise management systems	3	3
23.	IT system management	3	3
24.	High load web systems	2	2
25.	Enterprise database administration and optimization	2	2
Practice and Scientific Research (54 ECTS cr)			
26.	Research practice	4	18
27.	Scientific and industrial practice	2	6
28.	Teaching practice	3	3
29.	Research project	1, 2, 3	27
Final Certification (15 ECTS cr)			
30.	State examination	4	1,5
31.	Master's thesis and seminar	4	13,5