

3. PROGRAM STRUCTURE AND ACADEMIC CONTENT:

Table 2.1 Curriculum of Information Systems Degree Programme (Bachelor's Degree)

Module No.	Module	Module Scope, ECTS credits	Final Control Form of the Module	Course	Scope of the Course, ECTS credits	Control Form of the Course	Semester								
							1	2	3	4	5	6	7	8	
Basic Modules (all courses of the module are compulsory for learning)															
1	Basics of Natural Sciences	3	Examination	Physics	3	Computer-Based Testing	3								
2	Basics of Mathematics	6	Examination	Mathematics 1	3	Computer-Based Testing	3								
				Mathematics 2	3	Computer-Based Testing		3							
3	History of the State	4	State Exam	Modern History of Kazakhstan	4	Computer-Based Testing		4							
4	Foreign Language	9	Comprehensive Examination	English (German) Language	6	Written Control Work	6								
				English (German) Language	3	Computer-Based Testing		3							
5	National Language	9	Comprehensive Examination	Kazakh Language	6	Written Control Work	6								
				Kazakh Language	3	Computer-Based Testing		3							
6	Recreation Classes (Beginner Level)	4	Graded Test	Physical Education	2	Graded Test	2								
				Physical Education	2	Graded Test		2							
7	Recreation Classes (Intermediate Level)	4	Graded Test	Physical Education	2	Graded Test			2						
				Physical Education	2	Graded Test				2					
8	Social and Humanitarian Knowledge	8	Comprehensive Examination	Manashtanu	1	Reference Paper	1								
				Political and Social Studies	4	Computer-Based Testing	4								
				Cultural Studies and Psychology	3	Computer-Based Testing		3							
9	Programming Basics	7	Examination	Algorithms, Data Structures and Programming	7	Computer-Based Testing		7							
10	Mathematics	5	Examination	Mathematics 3	5	Computer-Based Testing			5						

11	Information and Communication Technologies	5	Examination	Information and Communication Technologies	5	Computer-Based Testing			5						
12	Profound Language Learning	6	Comprehensive Examination	Professional Kazakh (Russian) Language	3	Computer-Based Testing				3					
				Professionally-Oriented Foreign Language	3	Computer-Based Testing				3					
13	Basics of Information Systems	3	Examination	Basics of Information Systems	3	Computer-Based Testing				3					
14	Philosophy	5	Examination	Philosophy	5	Computer-Based Testing				5					
15	IT-Infrastructure	5	Examination	IT-Infrastructure	4	Written Control Work					5				
16	Databases in Information Systems	5	Examination	Databases in Information Systems	5	Written Control Work					5				
17	Final Internship	15	Internship Report Defense	Work Experience Internship 3	10	Internship Report Defense									10
				Pre-Graduation Internship	5	Internship Report Defense								5	
18	Final Academic Assessment	15	State Exam	State examination in the specialty	4	Written Control Work									4
			Diploma Thesis Defense	Developing and defending a thesis	11	Bachelor's Thesis Defense								11	
Elective Modules (containing elective courses)															
19	Basics of the Profession (Elective Modul 1, EM1)	10	Comprehensive Examination	Elective cours EM1	5	Written Control Work	5								
				Elective cours EM1	3	Computer-Based Testing		3							
				Practical Training 1,2	2	Internship Report Defense		2							
20	Technologies of Technogenic Risk Management (Elective Modul 2, EM2)	3	Examination	Elective cours EM2	3	Computer-Based Testing				3					
21	Data Management and Knowledge Systems (Elective Modul 3, EM3)	18	Comprehensive Examination	Elective cours EM3	7	Computer-Based Testing			7						
				Elective cours EM3	4	Written Control Work			4						
				Elective cours EM3	3	Course Paper			3						
				Work Experience Internship 1	4	Internship Report Defense			4						
22		11		Elective cours EM4	4					4					

