KHAZAR UNIVERSITY
Information Security B.S. Program

1st Year

CODE	Fall Semester	KU	ECTS	Prerequsite	CODE	Spring Semester	KU	ECTS	Prerequsite
MATH101	Calculus-1	3	6		MATH105	Calculus-2	3	6	
INS105	Fundamentals of Information Security	3	6			Fundamentals of Computer Networks	3	6	
CMS140	Fundamentals of Programming	3	6			Fundamentals of Cybersecurity	3	6	
ENGL101	English Foundations-1	4	8		ENGL102	English Foundations-2	4	8	ENGL101
AZLL110	Business and Academic Communication in Azerbijani Language	3	6		AZH150	Azerbaijan History	3	6	
					AZC 202	Azerbaijan Culture	2	4	
	Credit	16	32			Credit	18	36	

2nd Year

CODE	Fall Semester	KU	ECTS	Prerequsite	CODE	Spring Semester	KU	ECTS	Prerequsite
MATH 231	Linear Algebra	3	6			Legal Foundations of Information Security and Cybersecurity	3	6	
CMS 362	Operating Systems	3	6		MATH 312	Discrete Mathematics	3	6	
	Web Security	3	6			Information Security Management System	3	6	
ENGL 216	ESP	3	6	ENGL102		Major Elective-1	3	6	
	Humanities-1	3	6			Humanities-2	3	6	
	Credit	15	30			Credit	15	30	

3rd Year

CODE	Fall Semester	KU	ECTS	Prerequsite	CODE	Spring Semester	KU	ECTS	Prerequsite
MATH 217	Probability Theory	3	6			Fundamentals of Penetration Testing	3	6	
	Fundamentals of Cryptography	3	6			Cloud Security	3	6	
	Network Security	3	6			Database Security	3	6	
	Major Elective-2	3	6			Major Elective-3	3	6	
	Social Sciences-1	3	6			Social Sciences-2	3	6	
	Credit	15	30			Credit	15	30	

CODE	Summer Semester	KU	ECTS	Prerequsite
	Internship	6	12	
	Credit			

4th Year

CODE	Fall Semester	KU	ECTS	Prerequsite	CODE	Spring Semester	KU	ECTS	Prerequsite
	Secure Programming	3	6			Security of Electronics and IoT Devices	3	6	
	Fundamentals of Digital Forensies	4	8			Security of Industrial Control Systems	3	6	
MED315	Life Science	3	6			Major Elective-6	3	6	
	Major Elective-4	3	6			Major Elective-7	3	6	
	Major Elective-5	3	6			Credit	12	24	
	Credit	16	32						

CODE	* Humanity	6
	Engineering Ethics	
	Critical Thinking	
	Fundamentals of Entrepreneurship and Introduction to Business	
	Education and Career Planning	

CODE	** Social Sciences	6
	Psychology	
	Sociology	
	Fundamentals of Law	

CODE	***Science and Technology	9
MATH101	Calculus-1	3
CMS140	Fundamentals of Programming	3
MED315	Life Science	3

CODE	****Major Electives	KU	ECTS	Prerequsite
	Programming Language	3	6	
	Numerical Methods	3	6	
	Fundamentals of Data Center Operations	3	6	
	Security Equipment	3	6	
	Enterprise Network Systems Security	3	6	
	Graph Theory	3	6	
	Machine Learning	3	6	
	Blockchain Technology	3	6	
	Web Programming	3	6	
	Cloud Technologies	3	6	
	Applied Statistics and Data Analytics	3	6	
	Parallel and Distributed Computing	3	6	
	Software Engineering	3	6	
	System Design	3	6	
	Social Network Analysis	3	6	
	Social Engineering	3	6	
	Mobile Device Programming	3	6	
	Mobile Device Research		6	
	Software Project Management	3	6	
	Malware Analysis	3	6	

		KU	ECTS
●	University Requirement English	11	22
●●	University Requirement Aze	8	16
*	Humanity	6	12
**	Social Sciences	6	18
***	Science and Technology	9	12
	Major Courses	88	176
	Total Credit for Graduation	128	256