

KHAZAR UNIVERSITY
BIOTECHNOLOGY B.S Program

1st Year

CODE	Fall Semester (I)	KU	ECTS
AZH150	Azerbaijan history	3	6
ENGL101T	English Foundations - 1	4	8
BIO105	General zoology (elective)	3	6
AZC 202	Azerbaijani culture and multiculturalism	2	4
BIO101	General biology	3	6
	TOTAL	15	30

CODE	Spring Semester (II)	KU	ECTS
ENGL 102T	English Foundations-2	4	8
AZLL 110T	Azerbaijani language	3	6
BIOT150	Introduction to biotechnology	3	6
CMS 101	Introduction to Computer Science (science and tech)	3	6
MATH180	Mathematics and statistics for biological sciences (science and tech)	3	6
BIOT190	Molecular biology	3	6
	TOTAL	19	38

2nd Year

CODE	Fall Semester (III)	KU	ECTS
ENGL 103	Academic English	3	6
	Chinese language - 1 (Humanity 1)	3	6
BIOT	Cytology and histology	3	6
BIOT	Advanced biotechnology	3	6
	Life Science (science and tech)	3	6
	Applied physics	2	4
	TOTAL	17	34

CODE	Spring Semester (IV)	KU	ECTS
BIOT	Cell engineering	3	6
BIOT	Human and animal physiology	3	6
	Biotechnology management (Social sciences 1)	3	6
	Biophysics	3	6
	Chinese language - 2 (Humanity 2)	3	6
	TOTAL	15	30

3rd Year

CODE	Fall Semester (V)	KU	ECTS
BIOT	Plant physiology	3	6
BIOT	Plant biotechnology	3	6
BIOT	Research methods (seçmə)	3	6
	Applied chemistry	2	4
BIOT	Bioinformatics	3	6
	TOTAL	14	28

CODE	Spring Semester (VI)	KU	ECTS
BIOT	Biochemistry	3	6
BIOT	Cell culture	3	6
BIOT	Animal biotechnology	3	6
BIOT	Gene engineering	3	6
	Public health (Social science 2)	3	6
	TOTAL	15	30
	Summer practice	6	12

4th Year

CODE	Fall Semester (VII)	KU	ECTS
BIOT	Immunology	3	6
BIOT	Biotechnology of microorganisms	3	6
BIOT	Molecular genetics	3	6
BIOT	Modern technologies in the food industry (elective)	3	6
BIOT	Gene editing (elective)	3	6
	TOTAL	15	30

CODE	Spring Semester (VIII)	KU	ECTS
BIOT	Environmental biotechnology (elective)	3	6
BIOT	Bioprocess engineering (elective)	3	6
BIOT	Stem cells and regenerative medicine (elective)	3	6
BIOT	Enzymology	3	6
	TOTAL	12	24

CODE	Humanity	6	
	Humanity-1 / Chinese language-1, German language-1	3	
	Humanity-2 / Chinese language-2, German language-2	3	
CODE	Social Sciences	6	
	Social sciences 1 / Biotechnology management	3	
	Social sciences 2 / Public health	3	
CODE	Science and Technology	9	
	Introduction to Computer Science (science and tech)	3	
	Life Science	3	
	Mathematics and statistics for biological sciences	3	

CODE	Major electives	KU	ECTS
BIOT	General zoology	3	6
BIOT	Research methods	3	6
BIOT	Modern technologies in the food industry	3	6
BIOT	Gene editing	3	6
BIOT	Environmental biotechnology	3	6
BIOT	Bioprocess engineering	3	6
BIOT	Stem cells and regenerative medicine	3	6
		21	42

University Requirement English	11	22
University Requirement Azeri	8	16
Humanity	6	12
Social Sciences	6	12
Science and Technology	9	18
Major courses	61	122
Major electives	21	42
Summer practice	6	12
Total	128	256