

ISTINYE UNIVERSITY
FACULTY OF ENGINEERING AND NATURAL SCIENCES
DEPARTMENT OF BIOINFORMATICS & GENETICS

1st SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ATA101	Atatürk's Principles and History of Turkish Revolution 1	2	0	2	TR
ENS101	Calculus 1	2	2	5	EN
ENS105	Physics 1	4	1	6	EN
ENS107	Computer Literacy	2	2	4	EN
ENS113	General Chemistry	2	0	3	EN
ENS115	General Biology 1	3	0	6	EN
SEG001	Manifest of Istinye 1	0	1	1	EN
TRK001	Turkish Language 1	2	0	2	TR
TOTAL		17	6	29	

2nd SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
ATA102	Atatürk's Principles and History of Turkish Revolution 2	2	0	2	TR
ENS102	Linear Algebra with Applications	2	2	5	EN
ENS104	Computational Mathematics	3	2	6	EN
ENS110	Calculus 2	2	2	5	EN
ENS114	General Biology 2	3	2	6	EN
TRK102	Turkish Language 2	2	0	2	TR
	University Elective			5	
TOTAL		14	8	31	

3rd SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG201	Bioinformatics 1	3	2	5	EN
BEG203	Molecular Cell Biology	3	2	5	EN
ENS103	Computational Thinking	3	2	6	EN
ENS211	Basic Genetics	2	2	4	EN
	University Elective (English for Academic Purposes 1)			5	EN
	University Elective			5	
TOTAL		11	8	30	

4th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG202	Bioinformatics 2	3	2	5	EN
BEG204	Introduction to Data Science With R- Language)	3	2	4	EN
NS208	Organic Chemistry	4	0	5	EN
ENS303	Molecular Genetics	4	0	5	EN
SEG002	Manifest of Istinye 2	0	1	1	EN
	University Elective (English for Academic Purposes 2)			5	
	Department Elective			5	EN
TOTAL		14	5	30	

5th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG301	Genomics & Proteomics	3	0	3	EN
DIL101	General English 1	2	0	2	EN
ENS307	Human Genetics	3	0	4	EN
ENS309	Biochemistry 1	3	2	6	EN
ENS315	Recombinant DNA Technology	3	0	5	EN
	Department Elective			5	EN
	University Elective			5	
TOTAL		14	2	30	

6th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG312	Statics & Probability	2	2	5	EN
DIL102	General English 2	2	0	2	EN
ENS310	Molecular Biology Laboratory Techniques	3	2	6	EN
ENS311	Biochemistry 2	3	2	6	EN
SEG003	Manifest of Istinye 3	0	1	1	EN
	Department Elective			5	EN
	Department Elective			5	EN
TOTAL		10	7	30	

7th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG401	Biological data & Data mining	2	0	3	EN
BEG403	Computational Modeling & Simulation	3	2	5	EN
MBG407	Business Law, Occupational Health and Safety 1	2	0	2	EN
	Department Elective			5	EN
	Department Elective			5	EN
	Department Elective			5	EN
	University Elective			5	
TOTAL		7	2	30	

8th SEMESTER					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG481	Graduation Project	2	5	7	EN
MBG404	Business Law, Occupational Health and Safety 2	2	0	2	EN
SEG004	Manifest of Istinye 4	0	1	1	EN
	Department Elective			5	EN
	Department Elective			5	EN
	Department Elective			5	EN
	Department Elective			5	EN
TOTAL		4	6	30	

Elective Major Area Courses					
CODE	COURSE	T	P	ECTS	Language of Instruction
BEG001	Human and Computer Interactions	3	0	5	EN
BEG002	Quantum Mechanism and Modeling	3	0	5	EN
BEG003	New Insights in Genetics & Bioinformatics	3	0	5	EN
BEG004	Drug Design & Pharmacokinetics	3	0	5	EN
BEG005	Neurobiology	3	0	5	EN
BEG006	Basics AI (neural networks)	3	0	5	EN
BEG008	Cell & Tissue Engineering	3	0	5	EN
BEG009	Design And Analysis Of Algorithms	3	0	5	EN
BEG0013	Green Biotechnology	3	1	5	EN

DESCRIPTION

T: Theoretic

P: Practice

ECTS: European Credit Transfer System

Language of Instruction: Defines the medium of the course regardless of the language of instruction of the department.