

FACULTY OF ARTS AND SCIENCE
DEPARTMENT OF MOLECULAR BIOLOGY AND GENETICS
BACHELOR OF SCIENCE PROGRAM IN ENGLISH

First Term (Fall)		T	P	C	ECTS
MBGE103	General Biology	3	4	5	7
MBGE113	Calculus I	3	0	3	4
MBGE115	General Chemistry I	3	2	4	5
TURK101	Turkish I	2	0	2	2
MBGE117	General Physics I	2	2	3	5
MBGE127	General Physics Laboratory I	0	2	1	2
ENGE103	English For Academic Purposes I	4	0	4	5
TOTAL		17	10	22	30
Second Term (Spring)		T	P	C	ECTS
MBGE104	Cell Biology I	3	4	5	7
MBGE114	Calculus II	3	0	3	4
MBGE116	General Chemistry II	3	2	4	5
TURK102	Turkish II	2	0	2	2
MBGE118	General Physics II	2	2	3	5
MBGE128	General Physics Laboratory II	0	2	1	2
ENGE104	English For Academic Purposes II (PRE:ENGE103)	4	0	4	5
TOTAL		17	10	22	30
Third Term (Fall)		T	P	C	ECTS
MBGE209	Cell Biology II	3	4	5	7
MBGE203	Genetics	3	0	3	3
MBGE222	Organic Chemistry	3	0	3	3
ATA201	Principles of Atatürk and History of Turkish Revolution I	2	0	2	2
BENG203	English for Specific and Academic Purposes I (PRE:ENGE104)	4	0	4	5
MBGE213	Molecular Biology	3	0	3	4
MBGE223	Molecular Biology Laboratory	0	4	2	4
MBGE215	Informatics Technologies for Biological Sciences	0	2	1	2
TOTAL		18	10	23	30
Fourth Term (Spring)		T	P	C	ECTS
MBGE202	Molecular Genetics	3	0	3	5
MBGE210	Microbiology	3	0	3	4
MBGE220	Microbiology Laboratory	0	4	2	4
MBGE230	Biochemistry I	3	0	3	4
BENG204	English for Specific and Academic Purposes 2 (PRE:BENG203)	4	0	4	5
MBGE218	History of Science and Ethics	2	0	2	2
MBGE208	Physiology	3	2	4	4
ATA202	Principles of Atatürk and History of Turkish Revolution II	2	0	2	2
TOTAL		20	6	23	30
Fifth Term (Fall)		T	P	C	ECTS
MBGE331	Biochemistry II	3	0	3	4

XXX	Nondepartmental Elective*	3	0	3	4
MBGE305	Recombinant DNA Technology	3	0	3	4
MBGE303	Research Techniques for Molecular Biology and Genetics	1	4	3	8
MBGE307	Entrepreneurship and Project Designing	2	0	2	2
MBGEXXX	Departmental Elective	3	0	3	4
MBGEXXX	Departmental Elective	3	0	3	4
TOTAL		18	4	20	30
Sixth Term (Spring)		T	P	C	ECTS
MBGE332	Biochemistry II Laboratory	0	4	2	4
MBGEXXX	Departmental Elective	3	0	3	4
MBGE304	Genetic Engineering	3	0	3	5
MBGE316	Biostatistics	3	2	4	5
MBGE309	Plant Biology	3	2	4	4
MBGEXXX	Departmental Elective	3	0	3	4
XXX	Technical Elective**	3	0	3	4
TOTAL		18	8	22	30
Seventh Term (Fall)		T	P	C	ECTS
MBGE409	Tissue Culture	2	2	3	5
MBGE403	Bioinformatics	2	2	3	5
MBGE407	Summer Practice	0	2	1	4
MBGE451	Graduation Project I	1	2	2	4
MBGEXXX	Departmental Elective	3	0	3	4
MBGEXXX	Departmental Elective	3	0	3	4
XXX	Technical Elective**	3	0	3	4
TOTAL		14	8	18	30
Eighth Term (Spring)		T	P	C	ECTS
MBGE402	Biotechnology	3	0	3	5
MBGE452	Graduation Project II	1	4	3	10
MBGE406	Seminars in Molecular Biology and Genetics	1	0	1	3
MBGEXXX	Departmental Elective	3	0	3	4
MBGEXXX	Departmental Elective	3	0	3	4
MBGEXXX	Departmental Elective	3	0	3	4
TOTAL		14	4	16	30

T: Theoretical course weekly hours, **P:** Practical course weekly hours, **C:** Credits,
ECTS: European Credit Transfer System

* Nondepartmental Elective: Courses offered by other departments having at least 4 ECTS

** Technical Elective: Courses offered by Department of Molecular Biology (MBGXXX) and Genetics or Department of Academic English (ENGXXX) having at least 4 ECTS, and which are presented in the lists of departmental and technical elective courses

TOTAL (Minimum Departmental Graduation Requirements)	Theoretical	Practical	Credits	Hour	ECTS
	136	60	166	196	240

University Compulsory Courses		T	P	C	ECTS
ICT100	Computer Literacy	2	0	2	2
GSB/HSB	Fine Arts Elective/First Aid	0	2	1	1
ORY100	Introduction to University Life	1	0	1	1

Departmental Elective Courses		T	P	C	ECTS
MBGE312	Plant Physiology	3	0	3	4
MBGE313	Ecology	3	0	3	4
MBGE321	Applied Microbiology	3	0	3	4
MBGE315	Immunology	3	0	3	4
MBGE323	Signal Transduction	3	0	3	4
MBGE327	Neuroscience	3	0	3	4
MBGE328	Behavioral Genetics	3	0	3	4
MBGE333	Genetic Diseases	3	0	3	4
MBGE340	Biophysics	3	0	3	4
MBGE345	Introduction to Omics Technologies	3	0	3	4
MBGE346	Biodiversity	3	0	3	4
MBGE411	Plant Molecular Biology	3	0	3	4
MBGE414	Bioinformatics II	2	2	3	4
MBGE416	Embryology	3	0	3	4
MBGE417	Stem Cell Biology	3	0	3	4
MBGE418	Cancer Molecular Biology	3	0	3	4
MBGE419	Functional Genomics	3	0	3	4
MBGE420	Plant Genetics and Biotechnology	3	0	3	4
MBGE422	Enzymology	3	0	3	4
MBGE424	Epigenetics	3	0	3	4
MBGE426	Free Radicals and Antioxidants	3	0	3	4
MBGE429	Animal Behaviors	3	0	3	4
MBGE430	Pharmacology	3	0	3	4
MBGE431	Pharmacogenetic	3	0	3	4
MBGE432	Biomolecules	3	0	3	4
MBGE434	Special Topics in Molecular Biology	3	0	3	4
MBGE435	Cell Cycle and Death	3	0	3	4
MBGE436	Nanotechnology	3	0	3	4
MBGE437	Tissue Engineering	3	0	3	4
MBGE438	Biomaterials	3	0	3	4
MBGE439	Evolutionary Biology	3	0	3	4
MBGE442	Biology and Law	3	0	3	4
MBGE443	Bioanalytical Techniques	3	0	3	4
Non-departmental Elective Courses Offered for Other Departments		T	P	C	ECTS
MBGE100	Introduction to Biological Sciences	3	0	3	5
MBGE200	Basic Biotechnology	3	0	3	5
Technical Elective Courses Offered by the Department of Academic English					
ENGE300	Developing English Language Skills	4	0	4	5
ENGE350	Translation	4	0	4	5
ENGE400	Presentation Skills	4	0	4	5
ENGE450	Advanced Academic Writing Skills	4	0	4	5