					D		culty of Engine ent of Molecu	•	ural Sciences I Genetics (English)						
	YEAR ONE														
	1st Term								2nd Term						
Code	Course Name	Т	Ρ	L	С	ECTS	Prerequisite	Code	Course Name	Т	Ρ	L	С	ECTS	Prerequisite
MBG101	General Biology I*	3	0	2	4	7		MBG102	General Biology II*	3	0	2	4	7	
MATH101	Calculus I*	3	2	0	4	6		MBG108	Introduction to Programming*	1	0	2	2	3	
PHYS101	Physics I*	3	0	2	4	6		MATH102	Calculus II*	3	2	0	4	6	
CHEM101	General Chemistry I*	3	0	2	4	6		PHYS102	Physics II*	3	0	2	4	6	
RCUL101	University Culture I*	0	2	0	1	1		CHEM102	General Chemistry II*	3	0	2	4	6	
RPSC109	Positive Psychology and Communcation Skills	3	0	0	3	5		RCUL102	University Culture II*	0	2	0	1	1	
Total Credits	;	15	4	6	20	31		Total Credits		13	4	8	19	29	

								YEAR TWO							
	3rd Term								4th Term						
Code	Course Name	Т	Ρ	L	С	ECTS	Prerequisite	Code	Course Name	Т	Ρ	L	С	ECTS	Prerequisite
MBG209	Microbiology*	3	0	2	4	6		MBG204	Introduction to Bioinformatics*	2	2	0	3	5	
MBG211	Genetics*	3	0	2	4	7		MBG210	Physiology*	3	0	2	4	6	
MBGXXX	Departmental Elective I	3	0	0	3	5		MBG212	Molecular Genetics	3	0	0	3	4	MBG 211
TURK101	Turkish Language I	2	0	0	2	3		CHEM104	Organic Chemistry*	3	0	2	4	6	
ATA101	Principles of Atatürk and History of Turkish Revolution I	2	0	0	2	3		TURK102	Turkish Language II	2	0	0	2	3	
ENG101	English I	3	0	0	3	3		ATA102	Principles of Atatürk and History of Turkish Revolution II	2	0	0	2	3	
RPRE104	Entrepreneurship and Project Culture	2	0	0	2	3		ENG102	English II	3	0	0	3	3	
Total Credits		18	0	4	20	30		Total Credits		18	2	4	21	30	

								YEAR THREE									
	5th Term							6th Term									
Code	Course Name	т	Ρ	L	с	ECTS	Prerequisite	Code	Course Name	т	Ρ	L	С	ECTS	Prerequisite		
MBG309	Biochemistry I*	3	0	2	4	7	CHEM 104	MBG304	Recombinant DNA Technology*	3	2	0	4	7	MBG 212		
MBG325	Biotechnology	3	0	0	3	4	MBG 212	MBG310	Biochemistry II*	3	0	2	4	7	CHEM 104		
MBG331	Current Developments in Molecular Biology*	0	2	0	1	1		MBG314	Molecular Cell Biology*	3	0	2	4	7			
MBGXXX	Departmental Elective II	3	0	0	3	5		MBG384	Summer Practice**	0	0	0	0	5			
XXXXXX	Field Elective I	3	0	0	3	5		MBGXXX	Departmental Elective III	3	0	0	3	5			
XXXXXX	Social Elective I	3	0	0	3	5		Total Credits	:	12	2	4	15	31			
XXXXXX	Social Elective II	3	0	0	3	5											
Total Credit	s	18	2	2	20	32											

## YEAR FOUR

	7th Term						
Code	Course Name	т	Р	L	с	ECTS	Prerequisite
MBG405	Immunology	2	0	0	2	3	
MBG493	Graduation Project*	0	0	6	3	5	
MBGXXX	Departmental Elective IV	3	0	0	3	5	
XXXXXX	Field Elective II	3	0	0	3	5	
XXXXXX	Field Elective III	3	0	0	3	5	
XXXXXX	Social Elective III	3	0	0	3	5	
OHS401	Occupational Health and Safety I	2	0	0	2	2	
Total Credi	ts	16	0	6	19	30	

8th Term														
e	т	Ρ	L	С	ECTS	Prerequisite								
	2	0	0	2	3									
"hesis*	0	0	8	4	10	MBG 493								
al Elective V	3	0	0	3	5									
al Elective VI	3	0	0	3	5									
e IV	3	0	0	3	5									
I Health and Safety II	2	0	0	2	2									
	13	0	8	17	30									
	e hesis* I Elective V I Elective VI IV	r r   2 2   hesis* 0   Il Elective V 3   Il Elective VI 3   IV 3   Health and Safety II 2	e T P   2 0 0   hesis* 0 0 0   il Elective V 3 0 0   il Elective VI 3 0 0   IV 3 0 0   Health and Safety II 2 0	r r r k	r r r r k c   2 0 0 2 0 0 2   hesis* 0 0 0 8 4   il Elective V 3 0 0 3 3 0 0 3   il Elective VI 3 0 0 3 3 0 0 3   ilV 3 0 0 2 3 0 0 3   Health and Safety II 2 0 0 0 2 2	r r r r c ECTS   2 0 0 0 2 3   hesis* 0 0 0 8 4 10   il Elective V 3 0 0 0 3 5   il Elective VI 3 0 0 3 5   iV 3 0 0 0 3 5   iVe Alexith and Safety II 2 0 0 0 2 2								

	Total Course Credits for Graduation	151
2023-2024	Total Course ECTS for Graduation	243
2023-2024	Total Elective Courses ECTS	65
	Elective Course Ratio	26%

•	These courses are under the Applied Course status.
••	These courses are under the Internship Course status.

	DEPARTMENTAL ELECTIVES					
Code	Course Name	Т	Ρ	L	С	ECTS
	Field : Biotechnology					
	Departmental Electives With Project (3rd Year &	-	_			
MBG318 MBG321	Microbial Metabolism Plant Genetics and Biotechnology	3	0	0	3	5
MBG441	Advanced Methods in Molecular Biology	3	0	0	3	5
MBG441 MBG427	Biochemical Ecology	3	0	0	3	5
MBG443	Advanced Clinical Biochemistry	3	0	0	3	5
	Departmental Electives (4th Year)					
MBG440	Forensic Biology	3	0	0	3	5
	Field : Cell Biology					
	Departmental Electives With Project (3rd Year &	4th Year	)			
MBG313	Cancer Molecular Biology	3	0	0	3	5
MBG341	Introduction to Toxicology	3	0	0	3	5
MBG343	Genetic Disorders	3	0	0	3	5
MBG342	Stem Cell Technologies	3	0	0	3	5
11100512	Departmental Electives (4th Year)	3	U	U	5	
MBG435	Neurochemistry	3	0	0	3	5
MBG4455	,	3	0	0	-	5
MBG442	Nutritional Biochemistry	3	0	0	3	5
	Field : Genetics					
	Departmental Electives With Project (3rd Year &			_	_	
MBG316	Genes, Environment and Behavior	3	0	0	3	5
MBG319	Functional Genomics and Transciptomics	3	0	0	3	5
MBG330	Epigenetics	3	0	0	3	5
MBG333	Molecular Evolution	3	0	0	3	5
MBG343	Genetic Disorders	3	0	0	3	5
	Departmental Electives (4th Year)					
MBG418	Pharmacogenetics	3	0	0	3	5
MBG419	Sports and Performance Genetics	3	0	0	3	5
	Field : Neurobiology					
	Departmental Electives With Project (3rd Year &	4th Year	)			
MBG307	Neurobiology	3	0	0	3	5
MBG317	Memory	3	0	0	3	5
MBG323	Special Topics in Neuroscience	3	0	0	3	5
MBG326	Neurodevelopment	3	0	0	3	5
IVIDG320	Departmental Electives (4th Year)	3	U	U	5	5
	, , , ,		0	0	2	
MBG411	Animal Behavior	3	0	0	3	5
MBG417	Neurophysics	3	0	0	3	5
MBG435	Neurochemistry	3	0	0	3	5
MBG205	Departmental Elective Courses (2nd Yea Plant Biology	r)	0	0	3	5
MBG340	Human Anatomy	3	0	0	3	5
MBG203	Biostatistics	3	0	0	3	5
MBG203 MBG213	Histology and Embryology	3	v	0	3	5

	Elective Foreign Languages						
Code	Course Name	Т	Ρ	L	С	ECTS	Prerequisite
ESP123	Spanish I	3	0	0	3	5	
ESP124	Spanish II	3	0	0	3	5	ESP123
CHN123	Chinese I	3	0	0	3	5	
CHN124	Chinese II	3	0	0	3	5	CHN123
ARB123	Arabic I	3	0	0	3	5	
ARB124	Arabic II	3	0	0	3	5	ARB123
RSN123	Russian I	3	0	0	3	5	
RSN124	Russian II	3	0	0	3	5	RSN123
	Field Elective Courses						
Code	Course Name	т	Ρ	L	С	ECTS	Prerequisite
MDB402	Industrial Microbiology	3	0	0	3	5	
MDB403	Problems and Progress in Biomedical Science	3	0	0	3	5	

## Field Elective Courses

For Field Elective courses, any departmental elective course (in English) having appropriate credits from other departments of Faculty of Engineering and Natural Sciences can be elected.

## Social Elective Courses

For Social Elective courses, any course (in English) having appropriate credits from other faculties can be elected.

	Social Elective Courses (Foreign Language	es)					
Code	Course Name	т	Ρ	L	С	ECTS	Prerequisite
ARB123	Arabic I	3	0	0	3	5	
ARB124	Arabic II	3	0	0	3	5	ARB123
CHN123	Chinese I	3	0	0	3	5	
CHN124	Chinese II	3	0	0	3	5	CHN123
ESP123	Spanish I	3	0	0	3	5	
ESP124	Spanish II	3	0	0	3	5	ESP123
FRN123	French I	3	0	0	3	5	
FRN124	French II	3	0	0	3	5	FRN123
GER123	German I	3	0	0	3	5	
GER124	German II	3	0	0	3	5	GER123
RSN123	Russian I	3	0	0	3	5	
RSN124	Russian II	3	0	0	3	5	RSN123