

İZMİR INSTITUTE OF TECHNOLOGY
FACULTY OF SCIENCE
DEPARTMENT OF MOLECULAR BIOLOGY AND GENETICS
2026 UNDERGRADUATE PROGRAM

First Semester				PRCD/CRC	ECTS
MBG	101	Biology I	(4+0)4		6
MBG	111	Biology Lab I	(0+4)2	CRC: MBG 101	2
CHEM	101	General Chemistry I	(4+0)4		5
CHEM	131	General Chemistry Laboratory I	(0+4)2	CRC: CHEM 101	2
PHYS	101	General Physics I	(4+0)4		5
PHYS	111	General Physics Lab I	(0+2)1		2
MATH	141	Basic Calculus I	(3+2)4		5
ENG	101	Development of Reading and Writing Skills I	(3+0)3		3
OHS	101	Occupational Health and Safety I	(1+0)1		1
				25 Credits	31

Second Semester				PRCD/CRC	ECTS
MBG	102	Biology II	(4+0)4		5
CHEM	102	General Chemistry II	(4+0)4		5
CHEM	132	General Chemistry Laboratory II	(0+4)2	CRC: CHEM 102	2
PHYS	102	General Physics II	(4+0)4		5
PHYS	112	General Physics Lab II	(0+2)1		2
MATH	142	Basic Calculus II	(3+2)4		6
ENG	102	Development of Reading and Writing Skills II	(3+0)3		3
GCC	101	Career Planning and Development	(2+0) NC		2
OHS	102	Occupational Health and Safety II	(1+0)1		1
				23 Credits	31

Third Semester				PRCD/CRC	ECTS
MBG	201	Cell Biology I	(3+0)3		5
MBG	203	Genetics	(4+0)4		5
MBG	213	Genetics Lab	(0+4)2	CRC: MBG 203	4
CHEM	221	Organic Chemistry	(4+0)4	PRCD: CHEM 101,102	5
CHEM	241	Organic Chemistry Laboratory	(0+4)2	CRC: CHEM 221	4
HIST	201	Principles of Atatürk I	(2+0) NC		2
TURK	201	Turkish Language I	(2+0) NC		2
Non-technical Elective			(3+0)3		3
				18 Credits	30

Fourth Semester				PRCD/CRC	ECTS
MBG	202	Molecular Biology	(4+0)4		5
MBG	212	Molecular Biology Lab	(0+4)2	CRC: MBG 202	4
MBG	206	Cell Biology II	(3+0)3		5
MBG	211	Cell Biology Lab	(0+4)2	CRC: MBG 206	4
MBG	205	Biostatistics	(2+2)3		5
HIST	202	Principles of Atatürk II	(2+0) NC		2

TURK	202	Turkish Language II	(2+0) NC		2
Non-technical Elective			(3+0)3		3
17 Credits					30

Fifth Semester				PRCD/CRC	ECTS
MBG	301	Biochemistry I	(3+0)3		6
MBG	311	Biochemistry Lab	(0+4)2	CRC: MBG 301	4
MBG	303	Molecular Genetics of Prokaryotes	(3+0)3		5
MBG	305	Applied Bioinformatics	(2+2)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
17 Credits					30

Sixth Semester				PRCD/CRC	ECTS
MBG	302	Biochemistry II	(3+0)3		7
MBG	304	Molecular Genetics of Eukaryotes	(3+0)3		8
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
15 Credits					30

Seventh Semester				PRCD/CRC	ECTS
MBG	411	Scientific Career Development	(2+0)2		2
MBG	413	Evolution, Ecology and Biodiversity	(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
MBG	390	Summer Practice	6 weeks		8
14 Credits					30

Eighth Semester				PRCD/CRC	ECTS
MBG	402	Seminars in Molecular Biology and Genetics	(2+0)2		5
MBG	408	Bioethics	(2+0)2		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
16 Credits					30

TOTAL				145 CREDITS	242
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