

**İZMİR INSTITUTE OF TECHNOLOGY**  
**FACULTY OF SCIENCE**  
**DEPARTMENT OF MOLECULAR BIOLOGY AND GENETICS**  
**2023 UNDERGRADUATE PROGRAM**

<b>First Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	101	Biology I	(4+0)4		7
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	(2+2)3		6
MATH	141	Basic Calculus I	(3+2)4		5
ENG	101	Development of Reading and Writing Skills I	(3+0)3		3
				<b>22 Credits</b>	<b>30</b>

<b>Second Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	102	Biology II	(4+0)4		6
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	(2+2)3		6
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
				<b>20 Credits</b>	<b>30</b>

<b>Third Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	201	Cell Biology I	(3+0)3		5
MBG	211	Cell Biology Lab	(0+4)2	CRC: MBG 201	4
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
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
				<b>18 Credits</b>	<b>30</b>

<b>Fourth Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	202	Molecular Biology	(4+0)4		8
MBG	212	Molecular Biology Lab	(0+4)2	CRC: MBG 202	5
MBG	206	Cell Biology II	(3+0)3		5
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
				<b>15 Credits</b>	<b>30</b>

<b>Fifth Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
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
<b>17 Credits</b>					<b>30</b>

<b>Sixth Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
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
<b>15 Credits</b>					<b>30</b>

<b>Seventh Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	411	Scientific Career Development	(2+0)2		2
Technical Elective			(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
<b>14 Credits</b>					<b>30</b>

<b>Eighth Semester</b>				<b>PRCD/CRC</b>	<b>ECTS</b>
MBG	402	Seminars in Molecular Biology and Genetics	(2+0)2		8
MBG	408	Bioethics	(2+0)2		7
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
Technical Elective			(3+0)3		5
<b>13 Credits</b>					<b>30</b>

<b>TOTAL</b>				<b>134 CREDITS</b>	<b>240</b>
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