

**IZMIR INSTITUTE OF TECHNOLOGY**  
**FACULTY OF SCIENCE**  
**DEPARTMENT OF PHYSICS**  
**UNDERGRADUATE PROGRAM**

<b>First Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	101	General Physics I	(2+2)3	6	
PHYS	111	General Physics Lab I	(0+2)1	2	CRCD: PHYS 101
MATH	145	Calculus for Engineering and Science I	(4+2)5	7	
CHEM	121	General Chemistry I	(3+0)3	5	
CHEM	141	General Chemistry Lab I	(0+2)1	2	
MBG	101	Biology I	(3+0)3	5	
ENG	101	Development of Reading and Writing Skills I	(3+0)3	3	
<b>19 Credits</b>				<b>30</b>	

<b>Second Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	102	General Physics II	(2+2)3	6	
PHYS	112	General Physics Lab II	(0+2)1	2	CRCD: PHYS 102
MATH	146	Calculus for Engineering and Science II	(4+2)5	8	
CHEM	122	General Chemistry II	(3+0)3	5	
CHEM	142	General Chemistry Lab II	(0+2)1	2	
PHYS	114	Introduction to Programming for Physicists	(3+0)3	4	
ENG	102	Development of Reading and Writing Skills II	(3+0)3	3	
<b>19 Credits</b>				<b>30</b>	

<b>Third Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	201	Waves and Optics	(4+0)4	6	
PHYS	203	Classical Mechanics I	(3+0)3	5	
PHYS	241	Introductory Electronic Circuits	(1+2)2	5	
MATH	255	Differential Equations	(4+0)4	6	
MATH	265	Basic Linear Algebra	(3+0)3	4	
HIST	201	Principles of Kemal Atatürk I	(2+0) NC	2	
TURK	201	Turkish Language I	(2+0) NC	2	
<b>16 Credits</b>				<b>30</b>	

<b>Fourth Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	204	Classical Mechanics II	(3+0)3	5	PRCD: PHYS 203
PHYS	212	Waves and Optics Lab	(0+4)2	2	PRCD: PHYS 201
PHYS	214	Programming for Physicists	(2+2)3	5	
PHYS	222	Modern Physics	(4+0)4	5	
PHYS	256	Calculus of Complex Variables	(3+0)3	5	
PHYS	266	Mathematical Methods of Physics	(3+0)3	4	
HIST	202	Principles of Kemal Atatürk II	(2+0) NC	2	
TURK	202	Turkish Language II	(2+0) NC	2	
<b>18 Credits</b>				<b>30</b>	

<b>Fifth Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	301	Electromagnetic Theory I	(4+0)4	8	
PHYS	305	Experiments in Modern Physics	(0+4)2	8	PRCD: PHYS 222
PHYS	321	Quantum Mechanics I	(3+0)3	8	
		Technical Elective I	(3+0)3	6	
<b>12 Credits</b>				<b>30</b>	

<b>Sixth Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	302	Electromagnetic Theory II	(4+0)4	8	PRCD: PHYS 301
PHYS	322	Quantum Mechanics II	(3+0)3	8	PRCD: PHYS 321
PHYS	326	Statistical Thermodynamics	(4+0)4	8	
		Technical Elective II	(3+0)3	6	
<b>14 Credits</b>				<b>30</b>	

<b>Seventh Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	421	Quantum Mechanics III	(3+0)3	9	PRCD: PHYS 322
PHYS	431	Condensed Matter Physics I	(3+0)3	9	
		Technical Elective III	(3+0)3	6	
		Technical Elective IV	(3+0)3	6	
<b>12 Credits</b>				<b>30</b>	

<b>Eight Semester</b>				<b>ECTS</b>	<b>PRCD/CRCD</b>
PHYS	432	Condensed Matter Physics II	(3+0)3	9	PRCD: PHYS 431
PHYS	452	Introduction to Particle Physics	(3+0)3	9	
		Technical Elective V	(3+0)3	6	
		Social Elective I	(3+0)3	3	
		Social Elective II	(3+0)3	3	
<b>15 Credits</b>				<b>30</b>	

<b>TOTAL</b>	<b>125 CREDITS</b>	<b>240</b>
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