

**Department of Mechatronics Engineering; Undergraduate Curriculum**  
(for student started to department in and after 2012-2013 Term)

Code	Course Name	Course Category	Credit	ECTS
<b>Semester 1</b>				
MATH 157	Extended Calculus I	Required	5	7,5
PHYS 101	Physics I	Required	4	6,0
CHEM 102	Chemistry	Required	4	6,0
COMPE 101	Introduction to Computers & Programming	Required	3	3,0
MECE 101	Fundamentals of Engineering	Required	1	1,0
ENG 101	English Communication Skills I	Required	4	4,5
TURK 101	Turkish Language I	Required	2	2,0
			<b>23</b>	<b>30</b>
<b>Semester 2</b>				
MATH 158	Extended Calculus II	Required	5	7,5
PHYS 102	Physics II	Required	4	6,0
COMPE 102	Computer Programming	Required	3	4,0
MECE 102	Fundamentals of Mechatronics Engineering	Required	1	2,0
MECE 104	Computer Aided Engineering Drawing	Required	3	4,5
ENG 102	English Communication Skills II	Required	3	4,0
TURK 102	Turkish Language II	Required	2	2,0
			<b>21</b>	<b>30</b>
<b>Semester 3</b>				
MATH 275	Linear Algebra	Required	4	6,0
MECE 203	Statics and Mechanics of Materials	Required	3	6,0
MECE 211	Electrical Systems Analysis	Required	3	5,0
MATE 208	Introduction to Materials Engineering	Required	3	5,0
IE 220	Probability and Statistics	Required	3	5,0
ENG 201	Advanced Communication Skills	Required	2	3,0
			<b>18</b>	<b>30</b>
<b>Semester 4</b>				
MATH 276	Differential Equations	Required	4	6,0
MECE 202	Principles of Engineering Design	Required	3	5,0
MECE 204	Dynamics	Required	3	6,0
MECE 212	Electronic Circuits	Required	3	5,0
MFGE 206	Manufacturing Processes	Required	3	5,0
ENG 204	Report Writing Skills	Required	2	3,0
			<b>18</b>	<b>30</b>
<b>Semester 5</b>				
MECE 301	Numerical Methods	Required	3	4,0
MECE 303	Theory of Machines	Required	3	5,0
MECE 305	Digital Signals and Systems	Required	3	5,0
MECE 307	Signals and Mechatronic Systems	Required	3	5,0
HIST 101	Princ. of Atatürk & Hist. of Turk. Rev. I	Required	2	2,0
NTE	Humanities & Social Sciences Elective	Non-Technical Elective	3	5,0
MECE 399	Summer Practice I	Required	NC	4,0
			<b>17</b>	<b>30</b>
<b>Semester 6</b>				
MECE 302	Mechatronic Components	Required	3	5,0
MECE 304	Mechanical Machine Elements	Required	3	5,0
MECE 306	Dynamic Systems and Control I	Required	3	5,0
MECE 308	Microcontrollers	Required	3	5,0
MECE 310	Thermodynamics and Heat Transfer	Required	3	3,0
HIST 102	Princ. of Atatürk & Hist. of Turk. Rev. II	Required	2	2,0
NTE	Humanities & Social Sciences Elective	Non-Technical Elective	3	5,0
			<b>20</b>	<b>30</b>
<b>Semester 7</b>				
MECE 401	Mechatronic Design I	Required	3	5,0
MECE 403	Mechatronic Instrumentation	Required	3	5,0
MECE 405	Dynamic Systems and Control II	Required	3	5,0
MECE 407	Undergraduate Research Project I	Required	3	3,0
TE	Technical Elective	Technical Elective	3	4,0
TE	Technical Elective	Technical Elective	3	4,0
MECE 499	Summer Practice II	Required	NC	4,0
			<b>18</b>	<b>30</b>
<b>Semester 8</b>				
MECE 402	Mechatronic Design II	Required	3	5,0
MECE 404	Intelligent Mechatronics	Required	3	5,0
MECE 406	Digital Control	Restricted Elective	3	5,0
MECE 408	Undergraduate Research Project II	Required	3	5,0
IE 305	Engineering Economic Analysis	Required	3	5,0
TE	Technical Elective	Technical Elective	3	4,0
ORY 400	Social and Cultural Activities	Required	NC	1,0
			<b>18</b>	<b>30</b>
<b>Total:</b>			<b>153</b>	<b>240</b>