

**MECT-2021 CURRICULUM (Pre and/or CoRequisites)**

<b>Sem.</b>	<b>Code</b>	<b>Course</b>	<b>Local</b>	<b>ECTS</b>	<b>PreRequisites (CoRequisites)</b>
1	MATH1111	Calculus-I	4	5	None
	PHYS1111	Physics-I (Mechanics)	3	5	None
	PHYS1113	Physics-I (Lab.)	1	1	(PHYS1111)
	ITEC1001	Computer Literacy	0	1	None
	ENGL1101	Academic English-I	3	4	None
	CORE0101	History of Turkish Rep.-I	2	2	None
	CORE0103	Turkish-I	2	2	None
	CORE0105	Orientation	0	1	None
	CORE0201	Nature, Science, Human-I	3	5	None
CORE0401	Society, Science and Human	3	4	None	
<b>Semester Total</b>			<b>21</b>	<b>30</b>	
2	MATH1112	Calculus-II	4	5	MATH1111
	COMP1103	Int. to Programming	4	5	None
	ENGL1102	Academic English-II	3	4	ENGL1101
	CORE0102	History of Turkish Rep.-II	2	2	None
	CORE0104	Turkish-II	2	2	None
	CORE0106	Career Planning	0	1	None
	CORE0108	Major Works	2	3	None
	CORE0202	Nature, Science, Human-II	3	5	None
	CORE0501	Art, Society, Human	2	3	None
<b>Semester Total</b>			<b>22</b>	<b>30</b>	
3	MATH2104	Linear Algebra	3	5	None
	MATH2105	Calculus-III	4	6	MATH1112
	PHYS1112	Physics-II (Electricity & Mag.)	3	5	None
	PHYS1114	Physics-II (Lab.)	1	1	(PHYS1112)
	MECH1120	Engineering Drawing	4	6	None
	CORE0107	Creative Thinking & Prob. Sol.	2	3	None
	CORE0402	Ethics, Law & Society	2	3	None
<b>Semester Total</b>			<b>18</b>	<b>29</b>	
4	MATH2107	Differential Equations	4	6	MATH1111
	MATH2205	Applied Probability & Statistics	3	6	None
	MECT2520	Materials & Manufacturing	4	6	None
	ELEC1411	Logic Design	3	4	(ELEC1402)
	ELEC1402	Logic Design Lab.	1	2	(ELEC1411)
	ELEC2205	Electrical Circuits	3	5	(PHYS1112) and (MATH1112) and (ELEC2207)
	ELEC2207	Electrical Circuits Lab.	1	2	(ELEC2205)
<b>Semester Total</b>			<b>18</b>	<b>31</b>	
5	CHEM1101	General Chemistry	3	5	None
	MECH2130	Computational Methods in Eng.	3	5	None
	MECH3111	Measurements & Instrument.	2	3	PHYS1111 and Junior Standing
	MECH3422	Modelling & Control of Dyn. S.	3	5	MATH2107
	MECT2211	Engineering Mechanics-I	3	5	PHYS1111
	ECON1005	Int. to Economics	3	5	None
	MECT3920	Industrial Training-I	0	2	Sophomore Standing
<b>Semester Total</b>			<b>18</b>	<b>31</b>	

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6	MECT3122	Mechatronics Engineering Lab.	2	3	MECH3111
	MECT3322	Fund. of Thermal Sciences	3	5	MATH1102
	MECT2222	Engineering Mechanics-II	3	5	MECT2211
	MECT3445	Control Systems Design	3	5	MECH3422
	ELEC3305	Electronics	3	5	ELEC2205 and (ELEC3307)
	ELEC3307	Electronics Lab.	1	2	(ELEC3305)
	MECT-GE-1	General Elective-1	3	5	Check Pre/CoRequisites (if any)
<b>Semester Total</b>			<b>18</b>	<b>29</b>	
7	ENGR2105	Fluid Mechanics	3	5	MECT2222 and (MATH2107)
	ENGR4901	Int. to Design Projects	1	1	Senior Standing
	MECH3211	Machine Design-I	4	6	MECH1120 and MECT2222
	MECT4470	Modern Control Theory	3	5	MECH3422
	MECT-AE-1	Area Elective-1	3	5	(**) See the list of Area Electives
	MECT-GE-2	General Elective-2	3	5	Check Pre/CoRequisites (if any)
	OHES4411	Occupation Health & Safety-I	0	2	None
<b>Semester Total</b>			<b>16</b>	<b>29</b>	
8	MECT4902	Graduation Design Project	3	6	(*) See Project CoRequisites List
	MECT4411	Mechatronics System Design	3	5	ELEC3305 and (MECH3422)
	MECT-AE-2	Area Elective-2	3	5	(**) See the list of Area Electives
	MECT-AE-3	Area Elective-3	3	5	(**) See the list of Area Electives
	MECT-AE-4	Area Elective-4	3	5	(**) See the list of Area Electives
	OHES4412	Occupation Health & Safety-II	0	2	None
	MECH4920	Industrial Training-II	0	3	Junior Standing and (MECT3920)
<b>Semester Total</b>			<b>18</b>	<b>31</b>	
<b>Program Total</b>			<b>148</b>	<b>240</b>	

(\*) ENGR2105, MECT2520, ENGR4901, MECH3422, MECT4411, MECH3211, MECT3322

(**) Area Elective Courses	Pre Requisites, (CoRequisites)
MECH3224	MECH3211
MECH3244	ENGR2104 or MECT2222 and (MATH2107)
MECH4370	MECH2322 or MECT3322
MECH4380	ENGR2105
MECH4460	(MECH3422)
MECH4480	MECH3422
MECH4560	MECH3511 or MECT2520
MECH4570	MECH2510 or MECT2520
MECH3613	MECH2322 or MECT3322
MECH4614	ELEC2309 or ELEC2205
For Other Eng. Dept. Courses	Check Pre/CoRequisites (if any)