

MECH-2021 CURRICULUM (Pre / CoRequisites)

Sem.	Code	Course	Local	ECTS	PreRequisites (CoRequisites)
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
Semester Total			21	30	
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
Semester Total			22	30	
3	MECH1120	Engineering Drawing	4	6	None
	ENGR2101	Statics	3	4	PHYS1111
	MATH2104	Linear Algebra	3	5	None
	MATH2105	Calculus-III	4	6	MATH1112
	CORE0107	Creative Thinking & Problem Solv.	2	3	None
	CORE0402	Ethics, Law & Society	2	3	None
	OHES4411	Occupation Health & Safety-I	0	2	None
Semester Total			18	29	
4	ENGR2104	Dynamics	3	5	PHYS1111
	ENGR2102	Mechanics of Materials	4	6	ENGR2101
	MATH2107	Differential Equations	4	6	MATH1111
	MATH2205	Applied Probability & Statistics	3	6	None
	PHYS1112	Physics-II (Electricity & Mag.)	3	5	None
	PHYS1114	Physics-II (Lab.)	1	1	(PHYS1111)
	OHES4412	Occupation Health & Safety-II	0	2	None
Semester Total			18	31	
5	ENGR2105	Fluid Mechanics	3	5	ENGR2104, (MATH2107)
	MECH2510	Materials Science	3	5	(MECH2520)
	MECH2520	Materials Science Lab.	1	1	(MECH2510)
	MECH2322	Thermodynamics	3	5	MATH1112
	MECH3111	Measurements & Instrumentation	2	3	PHYS1111 and Junior Standing
	CHEM1101	General Chemistry	3	5	None
	ELEC2309	Fund. of Electrical/Electronic Eng.	3	5	None
	MECH3920	Industrial Training-I	0	2	Sophomore Standing
Semester Total			18	31	

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6	MECH3122	Mechanical Engineering Lab.	2	3	MECH3111
	MECH3211	Machine Design-I	4	6	MECH1120 and ENGR2102
	MECH3322	Heat Transfer	3	5	MECH2322 and MATH2107
	MECH3422	Modelling & Control of Dyn. Sys.	3	5	MATH2107
	MECH3511	Manufacturing Processes	3	5	MECH2510
	MECH2130	Computational Methods in Eng.	3	5	None
Semester Total			18	29	
7	MECH3224	Machine Design-II	3	5	MECH3211
	MECH3244	Theory of Machines	3	5	ENGR2104 and MATH2107
	MECH4330	Thermo-Fluid System Design	3	5	ENGR2105, (MECH3322)
	ENGR4901	Int. to Design Projects	1	1	Senior Standing
	MECH-AE-1	Area Elective-1	3	5	(**) See the list of Area Electives
	ECON1005	Int. to Economics	3	5	None
	MECH4920	Industrial Training-II	0	3	Junior Standing, (MECH3920)
Semester Total			16	29	
8	MECH4902	Graduation Design Project	3	6	(*) See Project CoRequisites List
	MECH-AE-2	Area Elective-2	3	5	(**) See the list of Area Electives
	MECH-AE-3	Area Elective-3	3	5	(**) See the list of Area Electives
	MECH-AE-4	Area Elective-4	3	5	(**) See the list of Area Electives
	MECH-GE-1	General Elective-1	3	5	Check Pre/CoRequisites (if any)
	MECH-GE-2	General Elective-2	3	5	Check Pre/CoRequisites (if any)
Semester Total			18	31	
Program Total			149	240	

(*) ENGR2105, MECH3511, ENGR4901, MECH3422, MECH4330, MECH3211

(**) Area Elective Courses	PreRequisites, (CoRequisites)
MECH4370	MECH2322 or MECH3322
MECH4380	ENGR2105
MECH4460	(MECH3422)
MECH4480	MECH3422
MECH4560	MECH3511 or MECH2520
MECH4570	MECH2510 or MECH2520
MECH3613	MECH2322 or MECH3322
MECH4614	ELEC2309 or ELEC2205
MECH4470	MECH3422