

ME Curriculum Course Prerequisites

2/7/2011

Required Courses

Course Title Prerequisites (* concurrency allowed)

Freshman Year

Spring Semester

CHM 1156	Chemistry II	CHM 1151, CHM 1101
MAT 1505	Calculus II	MAT 1500
PHY 2400	Physics I	MAT 1500*

Sophomore Year

Fall Semester

ME 2100	Statics	MAT 1505, PHY 2400
MAT 2500	Calculus III	MAT 1505
PHY 2402	Physics II	PHY 2400, MAT 1505*
ME 2505	ME Analysis & Design	MAT 1505, EGR 1205
PHY 2403	Physics Lab for Engineers	PHY 2402 (corequisite)

Spring Semester

CEE 2103	Mechanics of Solids	(ME 2100 or CEE 2105)
MAT 2705	Diff. Eqtns. & Lin. Alg.	MAT 1505
ME 2101	Dynamic Systems I	(ME 2100 or CEE 2105), MAT 2705*

Junior Year

Fall Semester

ME 3102	Dynamic Systems II	ME 2101
ME 3950	Heat Transfer I	ME 3100, MAT 2705,(ME 3600* or CEE 3500*)
ME 3402	Solid Mechanics & Design I	CEE 2103
ME 3600	Fluid Mechanics	MAT 2500, (ME 2100 or CEE 2104)

Spring Semester

ME 3333	Manufacturing	(ME 2100 or CEE 2105)
ME 3300	Materials Science I	CEE 2103, CHM 1156
ME 3103	Dynamic Systems III	ME 3102, ECE 2050
ME 3403	Solid Mechanics & Design II	ME 3402
ME 4850	Thermal-Fluid System Design	ME 3950
ME 3900	ME Lab II	ME 3300*

Senior Year

Spring Semester

ME 5006	Capstone Design II	ME 5005
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Elective Courses (Senior Year)

ME 5101	Elements of Aerodynamics	ME 3100, ME 3600
ME 5102	Compressible Fluid Flow	ME 3100, ME 3600
ME 5107	HVAC	ME 3100
ME 5110	Elements of Comp. Fluid Dyn.	ME 3600
ME 5200	Stress Analysis II	ME 3402
ME 5201	Intro. to Finite Elements	ME 3402, ME 3950*
ME 5203	Intro. to Automatic Controls	ME 3103*
ME 5301	Fracture and Fatigue	ME 3300
ME 5411	Mechatronics	ECE 2052, MAT 2705
ME 5421	Intro. to Robotics	ME 3103 or ECE 4290
ME 5500	Biomechanics	ME 3103, ME 5201*