

## MECHANICAL ENGINEERING CURRICULUM (131 CR)

### Freshman Year

160:159	Gen.Chem. for Engrs	3	160:160	Gen. Chem for Engrs.	3
160:171	Intro. Experimentation	1	440:127	Intro.Computers for Engrs	3
355:101	Expository Writing	3	640:152	Calculus for Eng'g	4
440:100	Intro. to Engineering	1	440:221*	Eng'g Mech (Statics)	3
640:151	Calculus for Eng'g	4	750:124	Analytical Physics Ib	2
750:123	Analytical Physics Ia	2	_____	Hum/Soc Elective	3
_____	Hum/Soc Elective	3			

### Sophomore Year

640:251	Multivariable Calculus	4	332:373*	Elem. of Elect. Eng'g	3M
650:231*	M.E. Comp Anal& Des.	3M	332:375*	Elem. Elect. Eng'g Lab	1M
440:222*	Eng'g Mech (Dynamics)	3	650:215*	Modern Machining	1M
750:227	Analyt. Physics IIa	3	640:244	Differential Equations	4
750:229	Analyt. Physics IIa Lab	1	650:291*	Mech. Materials	3M
_____	Hum/Soc Elective (300+)	3	750:228	Analyt. Physics IIb	3
			750:230	Analyt. Physics IIb lab	1

**Options:      Standard      Aerospace      Energy**

### Junior Year

540:343	Engineering Econ	3M	635:407	Mech. Prop. Materials	3M
640:421	Advanced Calculus	3M	650:342*	Design Mech Components	3M
650:312*	Fluid Mechanics	3M	650:351*	Thermodynamics	3M
650:350*	ME Measurements	4M	650:388*	CAD in Mech Eng'g	3M
_____	Hum/Soc Elective (300+)	3	220:102	MicroEconomics	3

### Senior Year

650:431	ME Lab I	2M	650:432/3/5	ME/Aero/Energy Lab II	2M
650:467	Engineering Projects I	2M	650:468	Engineering Projects II	2M
650:481*	Heat Transfer	3M	650:443*	Vibrations	3M
650:4__*	Dept/Aero/Energy Elec	3M	650:4__*	Dept/Aero/Energy Elec	3M
650:4__*	Dept/Aero/Energy Elec	3M	_____	Technical Elective	3
_____	Technical Elective	3	_____	General Elective	3

- ***If the The MAE courses marked with (\*) above can be taken either fall or spring semester***
- ***Technical Elective marked with (\*\*) is an MAE course then its grade counts towards the Major GPA***
- ***All MAE Departmental Electives can count for Technical Electives***

#### Aerospace Departmental Option Courses

650:401	System Dynamics & Controls; cf pg 6
650:447	Prob Models In AE Systems
650:449	Aerospace Materials; cf pg 6
650:458	Aerospace Structures
650:459	Aerospace Propulsion
650:460	Aerodynamics
650:463	Compressible Fluid Dynamics
650:465	Orbital Mechanics
650:471	Aircraft Flight Dynamics

#### Energy Departmental Option Courses

650:461	Internal Combustion Engines
650:462	Power Plants
650:474	Alternative Energy I
650:477	Alternative Energy II