

## Mechanical Engineering Courses & Prerequisites – Fall 2007

FRESHMAN YEAR - 1st semester			
	Course	cr hrs	prerequisite
	Gened 110 [A] GER	3	None
◆	Math 171 Calc I [N]	4	C or better in Math 107 or placement test
◆	Chem 105 Chem I [P]	4	Math 107c//, HS chem or 101
	ME 120 Innov in Design	2	none
◆	Engl 101 Comp [W]	3	placement test or Engl 100

SOPHOMORE YEAR - 1st semester			
	Course	cr hrs	prerequisite
	Math 220 Lin Alg	2	Math 171 or c//
	Math 273 Calculus III	2	C or better in Math 172; Math 220 or c//
◆	Phys 201 Engr Physics I [P]	4	C or better in Math 171 or Math 172 placement
◆	CE 211 Statics	3	Math 172 or c//, Phys 201 or c//
	Computer Programming*	2-4	see catalog
	Econ 102 Macroecon [S]	3	none

JUNIOR YEAR - 1st semester			
	Course	cr hrs	prerequisite
	ME 301 Thermodynamics	3	Phys 201, rec Math 315
	MSE 201(301) Materials Science	3	Chem 106, Phys 202 or c//
	Math/Stat 370 Statistics	3	Math 172
	ME 303 Fluid Dynamics	3	ME 212
	EE304 Circuits	2	Math 315 or c//
	ME 313 Engr Analysis	3	Math 315, Cpt Programming, MIE

SENIOR YEAR - 1st semester			
	Course	cr hrs	prerequisite
	Intercultural Studies [G,I,K]GER	3	See catalog
	ME 402 Thermal Systems Dsgn	3	ME 404, MIE
	ME 414 Machine Design	3	CE 215, ME316 or c//, rec ME220, MIE
	Tech Elect ME or MSE	3	see catalog
	ME 401 Mechatronics	3	ME348, EE304

FRESHMAN YEAR - 2nd semester			
	Course	cr hrs	prerequisite
	Gened 111 [A] GER	3	none
◆	Math 172 Calc II	4	C or better Math 171
◆	ME 103 Engr. Graphics (or ME 116)	3	none
	BioS Elective [B]GER	3	see catalog
	Chem 106 Chem II [P]	4	C or better in Math 107 & Chem 105 (or 115)

SOPHOMORE YEAR - 2nd semester			
	Course	cr hrs	prerequisite
	Math 315 Diff Equations	3	C or better in Math 220 & Math 273
	ME 212 Dynamics	3	CE 211
	Phys 202 Engr Physics II [P]	4	C or better in Phys 201; C or better in Math 172 or placement in Math273
	C E 215 Mechanics of Matls	3	CE 211
	ME 220 Matrlals Lab	1	CE 215 or c//
	Hum Elec [H, G]GER**	3	See catalog

***Must complete Writing Portfolio by the end of the Sophomore year.***

JUNIOR YEAR - 2nd semester			
	Course	cr hrs	prerequisite
	ME 305 Thermal Fluids Lab	2	ME 303 or c//, Math 370 or c//, MIE
	ME 310 Manufacturing Proc.	3	MSE 201(301), MIE
	ME 311 Manuf Lab	1	ME 310 or c//, MIE
	ME 316 Engr Design [M]	3	MSE 201(301) or c//, CE215, MIE
	ME 348 Dynamic Systems	3	ME 212, ME 313, MIE
	ME 404 Heat Transfer	3	ME 303 or c//, ME301, MIE

SENIOR YEAR - 2nd semester			
	Course	cr hrs	prerequisite
	Hum/SocS Tier III [H,G,S,K, T]***	3	see catalog
	Engl 402 GER (W or C)	3	Engl 101, Writing Portfolio completed
	Tech Elect ME or MSE	3	see catalog
	ME 416 Senior Design	3	ME 348, 404, 414 or c//
	ME 406 Exp Design Lab [M]	3	ME 305, ME 316, ME404, rec ME348

**Note: MIE = Certified Engr. Major**

◆ courses for certification

Technical Elective ME or MSE (400-level 3 credit course) or BE 425 (may take ME or MSE 500-level courses with permission)

\* Student may take EE221, CptS 121, 251(C prog.), 153(Visual Basic), FORTRAN

\*\*Students with a PSED of 2000 or later must select one of their H or S GERS from the diversity [D] Ger list (There are some TierIII Hum/Soc Sci in the diversity list)

\*\*\*Tier III Capstone must be in humanities or social science. See your advisor for information on selecting a course