

Mechanical Engineering Courses Prerequisites - Spring 2013

FRESHMAN YEAR - 1st semester		
course	cr hrs	prerequisite
Gened 110 [A] GER	3	none
♦ Math 171 Calc I [N] GER	4	C or better in Math107 or placement test
♦ Chem 105 Chem I [P] GER	4	Math 107c//, HS chem or 101
ENGR 120 Innov in Design	2	none
Engl 101 Comp [W] GER	3	placement test or Engl 100

FRESHMAN YEAR - 2nd semester		
course	cr hrs	prerequisite
Gened 111 [A] GER	3	none
♦ Math 172 Calc II	4	C or better in Math 171
Chem 106 Chem II [P] GER	4	Chem 105; C or better in Math107 or Math 171 placement
ME 116 CAD & Visualization	2	Math 171 or c//
BioS Elective [B]GER	3	See catalog

SOPHOMORE YEAR - 1st semester		
Math 220 Lin Alg	2	Math 171 or c//
Math 273 Calculus III	2	C or better in Math 172
♦ Phys 201 Engr Physics I [P] GER	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
EconS 102 Macroecon [S] GER	3	none

SOPHOMORE YEAR - 2nd semester		
Math 315 Diff Equations	3	C or better in Math 273; Math 220 with C or better or c//
ME 212 Dynamics	3	Math 172 with C or better; CE 211 with a C or better
Phys 202 Engr Physics II [P] GER	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 with C or better
ME 220 Materials Lab	1	CE 215 or c//
ME 216 Intergrated CAD Design	2	C or better in ME 116, CE 215 or c//

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

JUNIOR YEAR - 1st semester		
ME 301 Thermodynamics	3	C or better in Phys 201 , rec Math 315
MSE 201 Materials Science	3	Chem 106, Phys 201 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 or c//, CE 215,Cpt Programming

JUNIOR YEAR - 2nd semester		
apply for graduation by the end of this semester		
ME 305 Thermal Fluids Lab	2	ME 301, ME 303, Math 370 or c//; MIE
ME 310 Manufacturing Proc.	2	MSE 201, MIE
ME 311 Manufacturing Proc. Lab	1	ME 310 or c//, MIE
ME 316 Engr Design [M] GER	3	CE215; ME 216; MIE
ME 348 Dynamic Systems	3	ME 212, ME 313, MIE
ME 404 Heat Transfer	3	ME 303, ME301, MIE
Hum Elec [H, G]GER*	3	see catalog

SENIOR YEAR - 1st semester		
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, rec ME220, MIE
Tech Elect ***	3	see catalog
ME 401 Mechatronics	3	ME348, EE304

SENIOR YEAR - 2nd semester		
Hum/SocS [H,G,S,K] GER *	3	see catalog
Engl 402 [W] GER	3	Engl 101, Junior Standing
Tech Elect ***	3	see catalog
ME 416 Senior Design Tier III GER	3	ME 316, ME 348, 404, 414 or c//
ME 406 Exp Design Lab [M] GER	3	ME 220, ME 305, ME 316, ME404, rec ME348

Note: MIE = Certified Engr. Major

♦ courses for certification (need 'C' or better in each course to certify)

* Students with a PSED of 2000 or later must select one of their H or S GERS from the diversity [D] Ger list

** Students may take EE221, CptS 121 or higher (C++, JAVA, or Matlab)

*** Technical Elective: ME or MSE (400-level 3 credit course) or BE 425

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