

**Industrial & Enterprise Systems Engineering
General Engineering Undergraduate Curriculum
(131 credit hours)**

(Effective for first-year students entering Fall 1997 – Summer 2006)

Semester 1

CHEM 102 [101]—General Chemistry	3
CHEM 103 [105]—General Chemistry Lab	1
ENG 100—Engineering Lecture	0
GE 100—Intro to General Engineering	1
GE 101 [103]—Engineering Graphics & Design	3
MATH 220 [120]—Calculus I ²	5
Elective in Social Sciences or Humanities ³	<u>3</u>
	16

Semester 3

ECE 110—Intro Elec & Comp Engrg	4
GE 161 [188]—Intro to Business Side of Eng	1
MATH 242—Calculus of Several Variables	3
PHYS 212 [112]—Univ Physics, Elec & Mag	4
TAM 211 [152]—Statics	3
Elective in Social Sciences or Humanities ³	<u>3</u>
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Semester 5

ECE 211—Topics Analog Ckts & Systems	2
GE 310 [221]—Intro General Eng Design	3
GE 320 [222]—Introductory Control Systems	4
Secondary Field of Concentration Elective ⁴	3
Elective in Social Sciences or Humanities ³	<u>3</u>
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Semester 7

GE 400 [292]—Engineering Law ⁵	3
TAM 335 [235]—Introductory Fluid Mechanics	4
Design Elective ⁷	3
Engineering Science Elective ⁶	3
Secondary Field of Concentration Elective ⁴	<u>3</u>
	16

Semester 2

CS 101—Intro to Computing, Eng & Sci	3
MATH 230 [130]—Calculus II	3
MATH 225—Introductory Matrix Theory ²	2
PHYS 211 [111]—Univ Physics, Mechanics	4
RHET 105—Principles of Composition ¹	<u>4</u>
	16

Semester 4

GE 330 [288]—OR Meth for Profit & Value Eng	3
MATH 385 [285]—Intro Differential Equations	3
PHYS 214 [114]—Univ Physics, Quantum Phys	2
TAM 212—Introductory Dynamics	3
TAM 251 [221]—Introductory Solid Mechanics	3
Elective in Social Sciences or Humanities ³	<u>3</u>
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Semester 6

GE 312 [225]—Instrumentation and Test Lab	1
GE 311 [232]—Engineering Design Analysis	3
GE 331 [289]—Analyt Methods for Uncertainty	3
GE 424 [323]—State Space Desgn Meth in Cntl	3
Secondary Field of Concentration Elective ⁴	3
Elective in Social Sciences or Humanities ³	<u>3</u>
	16

Semester 8

GE 490 [291]—General Engineering Seminar	0
GE 494 [342]—Project Design, I	3
GE 495 [343]—Project Design, II	2
Secondary Field of Concentration Elective ⁴	3
Elective in Social Sciences or Humanities ³	3
Free Electives	<u>6</u>
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- 1 These two courses may be taken in reverse order depending upon RHET 105 availability.
- 2 It is recommended that freshmen with appropriate backgrounds in analytical geometry take the MATH 235, 245 calculus sequence (10 hours) instead of MATH 220, 230, 242 sequence (11 hours). If MATH 235, 245 are taken, MATH 415 (3 hours) should be taken in place of MATH 225.
- 3 Each student must satisfy the social sciences and humanities requirements of the College of Engineering, including ECON 102 or 103, and satisfy the campus general education requirements for social sciences and humanities. It is highly recommended ECON 102 or 103 be taken prior to the fourth semester.
- 4 To be selected from lists established by the department or by petition to the department.
- 5 Satisfies the General Education Advanced Composition requirement.
- 6 To be selected from the list of engineering science electives established by the department.
- 7 To be selected from the list of design electives established by the department.