

Industrial Engineering Curriculum - Effective 1999

Name:

SSN

Dept.	No.	Title	Hrs	Prereqs. (ID)	Comments
Math & Science					
MATH	191	Calculus & Analytic Geometry I	4	Math171 or equivalent	C or better
MATH	192	Calculus & Analytic Geometry I	4	Math191	C or better
MATH	280	Engineering Mathematics	4	Math192	
PHYS	251	General Physics I	4	Math191, Math192+	
PHYS	253	General Physics II	4	Phys251	
CHEM	103 or 105	Principles of Chemistry or General Chemistry I	4	Math151	
Subtotal hours			24		

Engineering Analysis

IE	220	Engineering Statics	2	Phys251	
IE	295	Manufacturing Materials & Processes	3		
MATH	300WI	Probability and Statistics I	3	Math192	
MATH	301	Probability and Statistics II	3	Math300	
IE/ENGR	302	Engineering Dynamics	3	IE220	
PHYS	306	Electronics	3	Phys253	
IE/ENGR	303, 310 or 312	Strength of Materials, Materials Science, or Thermodynamics (Note: Only 2 of 3)	3	303 - IE220, 310 - Phys253 & Chem103, 312 - Math280 & Phys253	
IE	315	Engineering Economy	3	Math191	
IE	335	Quality Control & Reliability	3	Math300	
Subtotal hours			29		

Engineering Design

IE/ENGR	110	Engineering Graphics	3		
IE	290 WI	Problem Solving with Microcomputers	3	ENGL101	
IE	300	Industrial Engineering Methods	3	Math300, IE290	
IE	304	Design Fundamentals for IE's	3	4 IE courses	
IE	340	Ergonomics & Occupational Safety	3	Math300	
IE	350	Operational Planning, Sched., & Control	3	IE295, IE300+	
IE	351 WI	Industrial Engineering Design Lab	3	IE315, IE300, IE350	
IE	375	Computer-Aided Manufacturing Systems	3	IE295, IE110	
MATH	390	Operations Research I	3	Math280	
MATH	391	Operations Research II	3	Math300	
IE	400	Introduction to Simulation	3	Math300	
IE	415	Systems Integration & Design	3	IE315, IE350	
IE	490 WI	Senior Design Seminar	3	9 IE courses	
Subtotal hours			39		

Liberal Arts & General Education

CSCI	195	Programming Language C & UNIX	3	CSCI120 or IE290	
ECON	101, 201, or 202	Survey of Economics or Principles of Macroeconomics or Principles of Micro-economics	3		
ENGL	101	Written Communication	3	"C" or better to pass	
ENGL	218 or 217	Technical Writing or Written Business Communication	3	ENGL101	
PHIL	207 or 305	Ethics or Business Ethics	3		
PED	149	Wellness Concepts	1		
PSYC	105	General Psychology	3		
FA		Fine Arts Elective	2		
FA		Fine Arts Elective	2		
HIST		History Elective	3		
Lit/Lang		IS201, 202, 203, or 204 (or may take SAU's Lit/Lang requirement)	3		
PHIL/THEO		Philosophy or Theology Elective	3		
THEO		Theology Elective	3		
COMM	101	Speech	2		
IE	450	Professional Experience	3	9 IE courses	
IE	201	Industrial Engineering Seminar I	0		
IE	301	Industrial Engineering Seminar II	0		
IE	401	Industrial Engineering Seminar III	0		

Subtotal hours 40 or 43

Total Hours 132 or 135

+ Co requisite