



Bachelor of Science Industrial & Systems Engineering 2006-2007

Student's Name _____ UID _____

First Year	Qtr.	Grd	(50 credit hours)		F	W	S	R		
CEG	220	4.0	___	___	Introduction to "C" Programming For Engineers-----	(EGR 101 or MTH 229)	a	x	a	a
CHM	121	5.0	___	___	Submicroscopic Chemistry-----	(High School Chemistry or CHM 101, MTH 127)	x	a	•	a
EGR	101	5.0	___	___	Introductory Mathematics for Engineering Applications-----	(MPL 5 + HS Trig or MTH 131)	x	a	a	a
EGR	190	4.0	___	___	Fundamentals of Engineering and Computer Science --	(freshmen only, others take ISE 210)	x	a	a	•
ENG	101	4.0	___	___	Academic Writing and Reading-----		x	a	a	a
ENG	102	4.0	___	___	Writing in Academic Discourse-----	(C or better in ENG 101)	a	x	a	a
ISE	195	2.0	___	___	Fundamentals of Industrial & Systems Engineering-----		•	•	x	•
MTH	229	5.0	___	___	Calculus I-----	(MTH 131 or MPL 7)	a	x	a	a
PHY	200	1.0	___	___	General Physics I Laboratory-----	(PHY 240c)	a	•	x	•
PHY	240	4.0	___	___	General Physics I-----	(EGR 101 or MTH 229, PHY 200c)	a	•	x	•
PSY	105	4.0	___	___	General Education Area III: Psychology: The Science of Behavior -	(See GE sec. of UG Cat)	a	a	x	a
___	___	4.0	___	___	General Education select one from Area II History-----	(See GE sec. of UG Catalog)	a	x	a	a
___	___	4.0	___	___	General Education select one from Area II Non-Western World	(See GE sec. of UG Catalog)	a	a	x	a

Credit Hours Per Quarter in the Model Program ----- 18 17 15

Second Year	Qtr.	Grd	(50 credit hours)		F	W	S	R		
ISE	301	4.0	___	___	Statistical Methods for Testing, Development and Manuf. I-----	(MTH 230 or EGR 101)	x	a	a	•
ISE	302	4.0	___	___	Statistical Methods for Testing, Development and Manuf. II-----	(ISE 301)	•	x	•	•
ISE	406	4.0	___	___	Human Factors in Engineering & Design-----	(PSY 105)	x	•	•	•
ME	212	4.0	___	___	Statics-----	(EGR 101 or MTH 231, PHY 240)	a	x	a	a
ME	213	4.0	___	___	Dynamics-----	(CEG 220, ME 212)	a	a	x	a
MTH	230	5.0	___	___	Calculus II-----	(MTH 229)	x	a	a	a
MTH	231	5.0	___	___	Calculus III-----	(MTH 230)	a	x	a	a
MTH	235	5.0	___	___	Differential Equations with Matrix Algebra-----	(MTH 231)	a	a	x	•
PHY	202	1.0	___	___	General Physics II Laboratory-----	(PHY 242c)	x	a	•	•
PHY	242	4.0	___	___	General Physics II-----	(EGR 101 or MTH 230, PHY 240, PHY 202c)	x	a	•	•
PHY	204	1.0	___	___	General Physics III Laboratory-----	(PHY 244c)	•	a	x	•
PHY	244	5.0	___	___	General Physics III-----	(EGR 101 or MTH 230, PHY 240, PHY 204c)	•	a	x	•
___	___	4.0	___	___	General Education select one from Area III-----	(See GE section of UG Catalog)	a	x	a	a

Credit Hours per Quarter in the Model Program----- 18 17 15

NOTES:

In the right hand columns:

- (x) denotes courses in a model program with a non-conflicting schedule for a full-time student.
- (a) denotes courses likely to be available.
- (•) denotes courses normally not available. Check the Class Schedule for current information.

Course numbers in parentheses denote a prerequisite course except that when followed by "c" indicating a co-requisite course.

Third Year	Qtr.	Grd	(50 credit hours)		F	W	S	R	
MTH	232	5.0	___	___	Calculus IV ----- (MTH 231)	a	a	x	a
EE	301	4.0	___	___	Circuit Analysis I -----(EGR 101, PHY 242, EE 302c)	a	x	a	•
EE	302	1.0	___	___	Circuit Analysis I Laboratory ----- (EE 301c)	a	x	a	•
EE	321	4.0	___	___	Linear Systems I ----- (EE 301, EE 302)	a	a	x	a
ISE	407	4.0	___	___	Industrial Ergonomics----- (ISE 301)	x	•	a	•
ISE	470	4.0	___	___	Deterministic Operations Research Models ----- (MTH 235, MTH 230)	x	•	•	•
ISE	471	4.0	___	___	System Performance Modeling ----- (ISE 302)	•	x	•	•
ISE	482	4.0	___	___	Operations and Facilities Design ----- (ISE 470)	•	•	x	•
ISE	484	4.0	___	___	Probabilistic Operations Research Models ----- (ISE 301)	•	x	•	•
ME	315	4.0	___	___	Thermodynamics I----- (PHY 244, MTH 232c)	x	a	a	a
___	___	4.0	___	___	General Education select one from Area IV -----(See GE section of UG Catalog)	x	a	a	a
___	___	4.0	___	___	General Education select additional course from Areas II, III and IV(See GE sec. of UG Cat.)	a	x	a	a
___	___	4.0	___	___	General Education select additional course from Areas II, III and IV(See GE sec. of UG Cat.)	a	a	x	a

Credit Hours Per Quarter in the Model Program ----- 16 17 17

Fourth Year	Qtr.	Grd	(45 credit hours)		F	W	S	R	
EGR	335	3.0	___	___	Technical Communication for Engineers and Computer Scientist----- (ENG 101, ENG 102)	a	x	a	a
ISE	451	4.0	___	___	Industrial & Systems Engineering in Computer Systems Design -----(CEG 220, ISE 301)	•	•	x	•
ISE	472	3.0	___	___	Design I----- (ISE 471)	x	•	•	•
ISE	473	3.0	___	___	Design II----- (ISE 472)	•	x	•	•
ISE	474	3.0	___	___	Design III ----- (ISE 473)	•	•	x	•
ISE	481	4.0	___	___	Engineering Economy -----(MTH 229 or EGR 101)	•	x	•	•
ISE	483	4.0	___	___	Integrated Systems for Manufacturing -----(MTH 231, ISE 301, ISE 470, ISE 471)	•	•	x	•
ISE	477	4.0	___	___	Systems and Process Analysis -----(ISE 301, ISE 471)	x	•	•	•
ISE	478	4.0	___	___	Computational Models for ISE----- (CEG 220, ISE 301, ISE 470)	•	•	x	•
BME	428	5.0	___	___	Biomechanics and Bioenergetics----- (ME 212, ME 315)	x	•	•	•
TECH ELEC	4.0	___	___	___	(Must meet with advisor for approval)-----	x	a	a	a
TECH ELEC	4.0	___	___	___	(Must meet with advisor for approval)-----	a	x	a	a

Credit Hours Per Quarter in the Model Program ----- 16 14 15

TOTAL PROGRAM CREDIT HOURS ----- 195

Meets or exceeds ABET minimum requirement of 37.5% engineering credit hours (73.13 credit hours).

Advisor
Initials

TECHNICAL ELECTIVES:

Technical electives represent a focus area and must be approved by student's advisor. Approved focus areas are listed below:

ISE Honors Undergraduate Thesis: ISE 499-9 and ISE 499-10.

Human Integrated Systems: Select two: ISE 431, ISE 465 and PSY 110.

Operations Management: MS 307 and MS 320. (Students who meet additional requirements in COBA receive a minor in Operations Management from the College of Business and Administration).

Ergonomic Systems: BME 420 and ISE 480.

Computer Science: Select two: ISE 465, CS 240 and CS 241. (Students who meet additional requirements in the Department of Computer Science and Engineering receive a minor in Computer Science for Engineers and Scientists)

Materials Science and Engineering: Select two: ME 220, ME 370, ME 371, and ME 472 (Students who meet additional requirements in the Department of Mechanical and Materials Engineering receive a minor in Materials Science and Engineering).