Bachelor of Science
Industrial & Systems Engineering
2005-2006

Student's Name _____ **SSN**_____

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	a	•
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	(48 credit hours)	F	W	S	R
BME 428	3.0	____ ____	Biomechanics and Biothermodynamics---------- (ME 212, ME 315)	•	•	x	•
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**	**15**	

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	•
MTH 232	5.0	____ ____	Calculus IV ---------- (MTH 231)	x	a	a	a
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 ----------	**193**			

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 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).