Student A# | Student Name (Last, First MI)

	Semester, Transfer or	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency	Offered: F=Fall S=Spring M=Summer
					English - 6 hours		
			EH 101	3	Freshman Composition I	Placement	FSM
			EH 102	3	Freshman Composition II	EH 101	FSM
					Mathematics - 18 hours		
			MA 171	4	Calculus A	MA 113 or MA 115 or Level III Placement	FSM
			MA 172	4	Calculus B	MA 171	FSM
			MA 201	4	Calculus C	MA 172	FSM
			MA 238	3	Applied Differential Equations	Prereq w/Con: MA 201	FSM
			MA 244	3	Introduction to Linear Algebra	MA 172	FSM
					Chemistry - 4 hours		
			CH 121	3	General Chemistry I	Plcmt or CH 101, MA 113 or 115, Prereq w/Con: MA 171, Coreq: CH 125	FSM
			CH 125	1	General Chemistry Lab I	Coreq: CH 121	FSM
					Physics - 8 hours		
			PH 111	3	General Physics w/Calculus I	MA 171	FSM
			PH 114	1	General Physics Lab I	Prereq w/Con: PH 111	FSM
			PH 112	3	General Physics w/Calculus II	MA 172, PH 111	FSM
			PH 115	1	General Physics Lab II	Prereq w/Con: PH 112	FSM
					Science Elective - 3 hours		
				3		BYS 119 or CH 123 or 300/400 level MA course	
					History, Social & Behavioral Sciences, Humaities & Fine Arts - 15 hours		
				3	HSBS	Choose 3 hours: History, Social or Behavior Science	FSM
				3	HFA	Choose 3 hours: Literature or Fine Art	FSM
				3		Choose 3 hour courses of HSBS/HFA that you have met prerequisites, from ARH, ARS*, CM, EH, ECN*, FL, GS, GY, HY, MU, PHL, PSC, PY, SOC, WS	
				3			
				3			
					General Education Electives - 3 hours		
						Choose up to 3 hours of electives (Ex. FYE 101): Any courses that you have met prerequisites, and are not remedial coursework for Engineering curriculum.	
					Engineering Core - 12 hours		
			MAE 271	3	Statics	PH 111, Prereq w/Con: MA 201	FSM
			EE 213	3	Electrical Circuit Analysis I	PH 112, Prereq w/Con: MA 238 & (MA 244 or CHE 244)	FSM
			ISE 321	3	Engineering Economy	Sophomore Standing	FSM
			MAE 341	3	Thermodynamics I	MA 201, CH 121, CH 125, PH 112	FSM
**	Class has required lab section				**Industrial & System Engineering Option - 46 hours**		
**			CPE 112	3	Intro to Computer Programming in Engineering	MA 113, MA 115 or Level III Placement, Coreq: CPE 112L	FSM
Select One			MAE 111	3	Intro to Computational Tools	Prereq w/Con: MA 113 or Level II Placement	FSM
			CE 111	2	Civil Engineering Graphics	MA 112 or Level II Placement, Freshman CE Standing	FS
			ISE 124	3	Intro to Industrial & Systems Engineering	Prereq w/Con: MA 113	F
			ISE 324	3	Work Design	ISE 390	F
			ISE 327	3	Management Systems Analysis	ISE 390	S
			ISE 340	3	Operations Research	Prereq w/Con: ISE 390	F
**			MAE 370	4	Mechanics of Materials	MAE/CE 271, MA 244 & (MAE 111 or CPE 112), Coreq: MAE 370L	FSM
			ISE 390	3	Probability & Engineering Statistics I	Prereq w/Con: MA 201	FSM
			ISE 391	3	Probability & Engineering Statistics II	ISE 390	S
			ISE 423	3	Statistical Quality Control	Prereq w/Con: ISE 391	S
			ISE 428	3	Systems Analysis & Design I	ISE 124, ISE 321, ISE 340, ISE 391, Senior Standing	F
			ISE 429	3	Systems Analysis & Design II	ISE 428	S
			ISE 430	3	Manufacturing Systems and Facilities Design	Senior Standing	F
			ISE 433	3	Production & Inventory Control Systems	ISE 390	S
			ISE 447	3	Intro to Systems Simulation	CPE 112, ISE 391	F
					Industrial & Systems Engineering Electives - 9 hours		
				3		Choose from MA 385, ISE 402, ISE 403, ISE 426, ISE 437, or other upper-level courses approved by the Department. May select a maximum of 6 hours from the following: EH 301, ACC 211, MTK 301, MGT 363, or MGT 462.	
				3			
				3			
					Technical Elective - 3 hours		
				3		200-level or above Engineering or Science course	

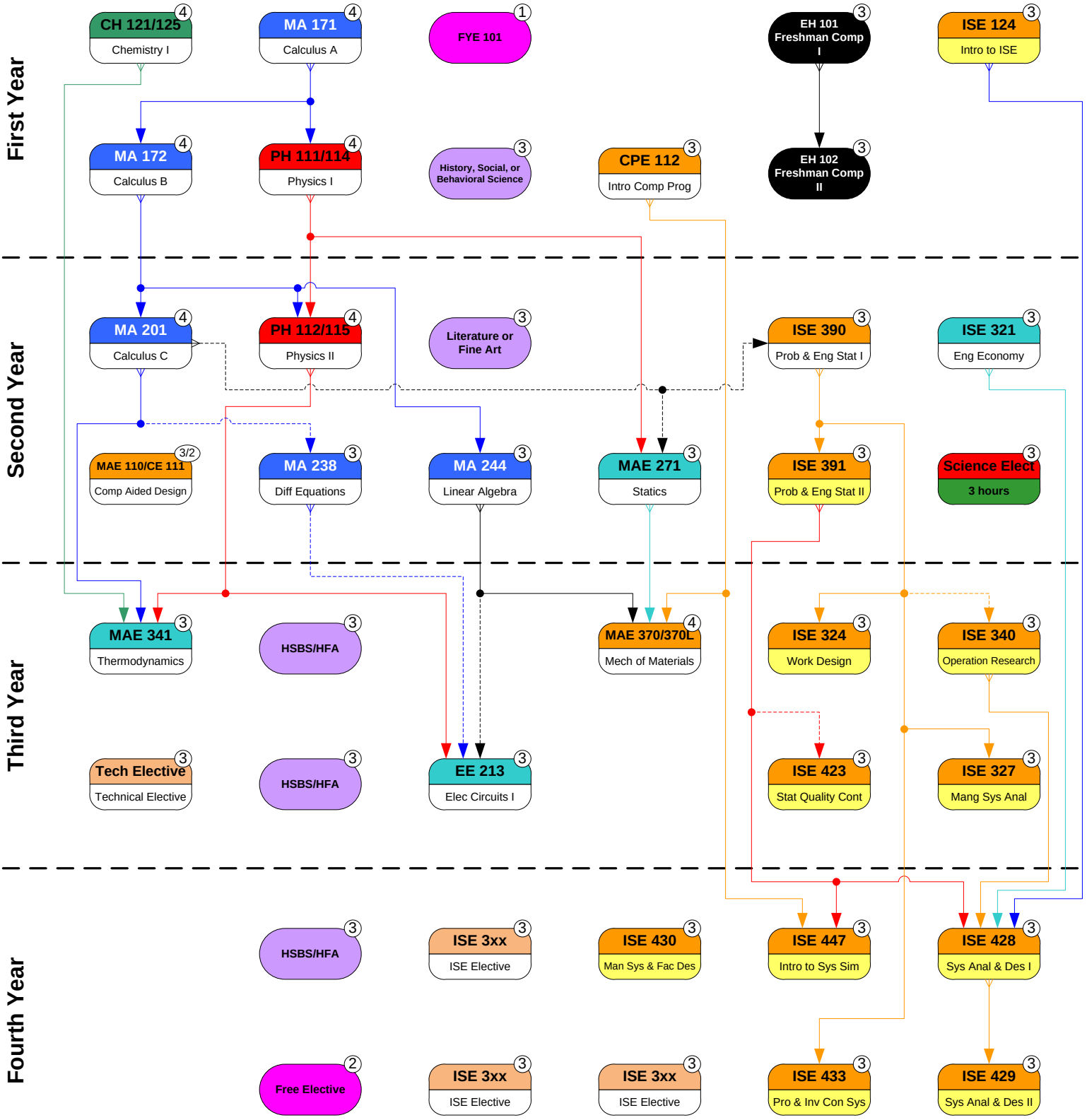
All prerequisite classes must be completed with a "C" or higher grade.

The Catalog is the final authority for all degree requirements.

Industrial & Systems Engineering Program 2013/2014 (127 Hours) UAHuntsville

Updated: 7/11/2013

Industrial & Systems Engineering Program 2013/2014 (127 Hours)



Legend

- Freshman Comp
- Mathematics
- Chemistry
- Physics
- History, Social, Behavior Science/Humanity & Fine Art
- Prerequisite
- Free Elective
- Engineering Core
- Industrial & Systems Eng Option
- Electives
- Offered that Semester Only
- (3) Credit Hours
- Prereq w/concurrency

THE UNIVERSITY OF ALABAMA IN HUNTSVILLE

Department	Prepared by	Date
Industrial & Systems	Jacob Kerstiens	8/8/13
Program	Approved by	Date
Industrial & Systems Engineering		

College of Engineering Pathways

Industrial & Systems Engineering 2013-2014 Plan

	Curriculum Pathway	Research Pathway	Internship Pathway	Co-op Pathway	

Miletone Year-1

[ ] 32 hours completed including:	[ ] Meet with Faculty to discuss pathway choices
MA 171, CH 121/125, FYE 101,	[ ] Meet with Career Development
EH 101, ISE 124	[ ] Attend Career Services Workshop on Resume
MA 172, PH 111/114, CPE 112,	[ ] Outline Resume
EH 102, HSBS/HFA	[ ] Participate in Career Fair

Milestone Year-2

[ ] 64 hours completed including:	[ ] Meet with Faculty for Undergraduate research opportunities
MA 201, PH 112/115, ISE 390,	[ ] Attend Career Services Workshop on Interviews
ISE 321, Sci Elec	[ ] Professional Resume
MA 238, MAE 271, ISE 391,	[ ] Attend Career Fair
MA 244, MAE/CE 111	[ ] Co-op/Internship Offer (Summer Start)

Milestone Year-3

Research Pathway	Internship Pathway	Co-op Pathway
[ ] 95 hours completed including:	[ ] 95 hours completed from Curriculum Pathway	[ ] Obtain Faculty Mentor
MAE 341, ISE 340, ISE 324, MAE 370, HSBS/HFA	[ ] Summer Internship	[ ] 91 hours completed including:
EE 213, ISE 423, ISE 327, HSBS/HFA, Tech Elec		Work Semester (Summer)
[ ] Undergraduate Research		ISE 340, ISE 324, ISE Elec, HSBS/HFA, HSBS/HFA
[ ] Attend JUMP Information Session		Work Semester (Spring)
		EE 213, MAE 341, MAE 370, Free Elec
		[ ] 2 Semesters of Co-op

Milestone Year-4

Research Pathway	Internship Pathway	Co-op Pathway
[ ] 127 hours completed including:	[ ] 127 hours completed from Curriculum Pathway	[ ] 103 hours completed including:
ISE 430, ISE 447, ISE 428, ISE Elec, HSBS/HFA	[ ] Summer Internship	Work Semester (Fall)
ISE 429, ISE 433, Free Elec, ISE Elec, ISE Elec, HSBS/HFA	[ ] Senior Design Complete	ISE 423, ISE 327, Tech Elec, HSBS/HFA
[ ] Undergraduate Research Complete	[ ] Degree Complete	Work Semester (Summer)
[ ] Senior Design Complete	[ ] Begin Career or Graduate School	[ ] Experiential Learning complete
[ ] Degree Complete		[ ] Decision on Industry or Graduate School
[ ] Begin Career or Graduate School		

Milestone Year-5

Co-op Pathway
[ ] 127 hours completed including:
ISE 447, ISE 428, ISE 430, HSBS/HFA
ISE 429, ISE 433, ISE Elec, ISE Elec
[ ] Senior Design Complete
[ ] Degree Complete
[ ] Begin Career or Graduate School

Required	
Recommended	