

Student A#				Student Name (Last, First MI)			Offered: F=Fall S=Spring M=Summer
Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency		
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, Coreq: 114		FSM
		PH 114	1	General Physics Lab I	Coreq: PH 111		FSM
		PH 112	3	General Physics w/Calculus II	MA 172, PH 111, Coreq: 115		FSM
		PH 115	1	General Physics Lab II	Coreq: PH 112		FSM
History, Social & Behavioral Sciences, Humanities & Fine Arts - 18 hours							
			3	History	HY 103, HY 104, HY 221, or HY 222		FSM
			3	Literature	EH 207 or EH 208		FSM
			3	Fine Art	ARH 100, ARH 101, ARH 103, CM 122, MU 100, or ARS 160		FSM
			3	Social & Behavioral Science	For more information on HSBS/HFA Requirements: http://www.uah.edu/images/colleges/engineering/CUE2%20Files/Forms/HSBS_HFA_Requirements.pdf		FSM
			3	Sequence Course			FSM
			3	HSBS/HFA			FSM
			3				
Engineering Core - 12 hours							
**		CPE 112	3	Intro to Computer Programming in Engineering	MA 113, MA 115 or Level III Placement, Coreq: CPE 112L		FSM
**		EE 202	3	Intro to Digital Logic Design	CPE 112, EE 100		FSM
		EE 213	3	Electrical Circuit Analysis I	PH 112, Prereq w/Con: MA 238 & (MA 244 or CHE 244)		FSM
		CPE 381	3	Fundamentals of Signals & Sys for Comp Engrs	EE 213, MA 238		FS
Computer Science - 6 hours							
		CS 214	3	Intro to Discrete Structures	CPE 112, MA 171		FSM
		CS 317	3	Design & Analysis of Algorithms	CS 214, CPE 212, MA 244		FSM
Computer Engineering Option - 47 hours							
**		EE 100	3	Fund of Computer, Electrical & Optical Eng	Prereq w/Con: MA 112, Coreq: EE 100L		FSM
**		CPE 212	3	Fundamentals of Software Engineering	CPE 112		FS
		CPE 221	3	Computer Organization	EE 202		FSM
		CPE 322	3	Digital Hardware Design Fundamentals	CPE 221, Coreq: CPE 324		S
		CPE 324	1	Digital Hardware Design Lab	Coreq: CPE 322		S
		EE 315	3	Introduction to Electronic Analysis and Design	EE 213		FSM
		EE 316	1	Electronic Measurements & Devices Design Lab	Prereq w/Con: EE 315		FS
		CPE 323	3	Intro to Embedded Computer Systems	CPE 221, Coreq: CPE 325		FS
		CPE 325	1	Lab Component of Intro of CE 323	Coreq: CPE 323		FS
		CPE 353	3	Software Design & Engineering	CPE 212, Prereq w/Con: CS 317		F
		EE 384	1	Digital Signal Processing Laboratory	CPE 381 or Prereq w/Con:EE 383		FS
		EE 385	3	Random Signals and Noise	CPE 381 or EE 382		FSM
Select One		ISE 390	3	Probability & Engineering Statistics I	Prereq w/Con: MA 201		FSM
		CPE 431	3	Intro to Computer Architecture	CPE 322, CPE 323		F
		CPE 434	3	Operating Systems	CPE 221, CPE 353, Coreq: CPE 435		F
		CPE 435	1	Operating Systems Lab	Coreq: CPE 434		F
		CPE 448	3	Introduction to Computer Networks	CPE 112, CPE 221, Coreq: CPE 448L		FS
		CPE 453	3	Senior Software Studio	CS 317, CPE 353		S
		CPE 495	3	Computer Engineering Design I	CPE 323, CPE 353, EE 315		F
		CPE 496	3	Computer Engineering Design II	CPE 495		S
Computer Engineering Electives - 9 hours							
			3		300 - level or above approved by advisor.		
			3				
			3				

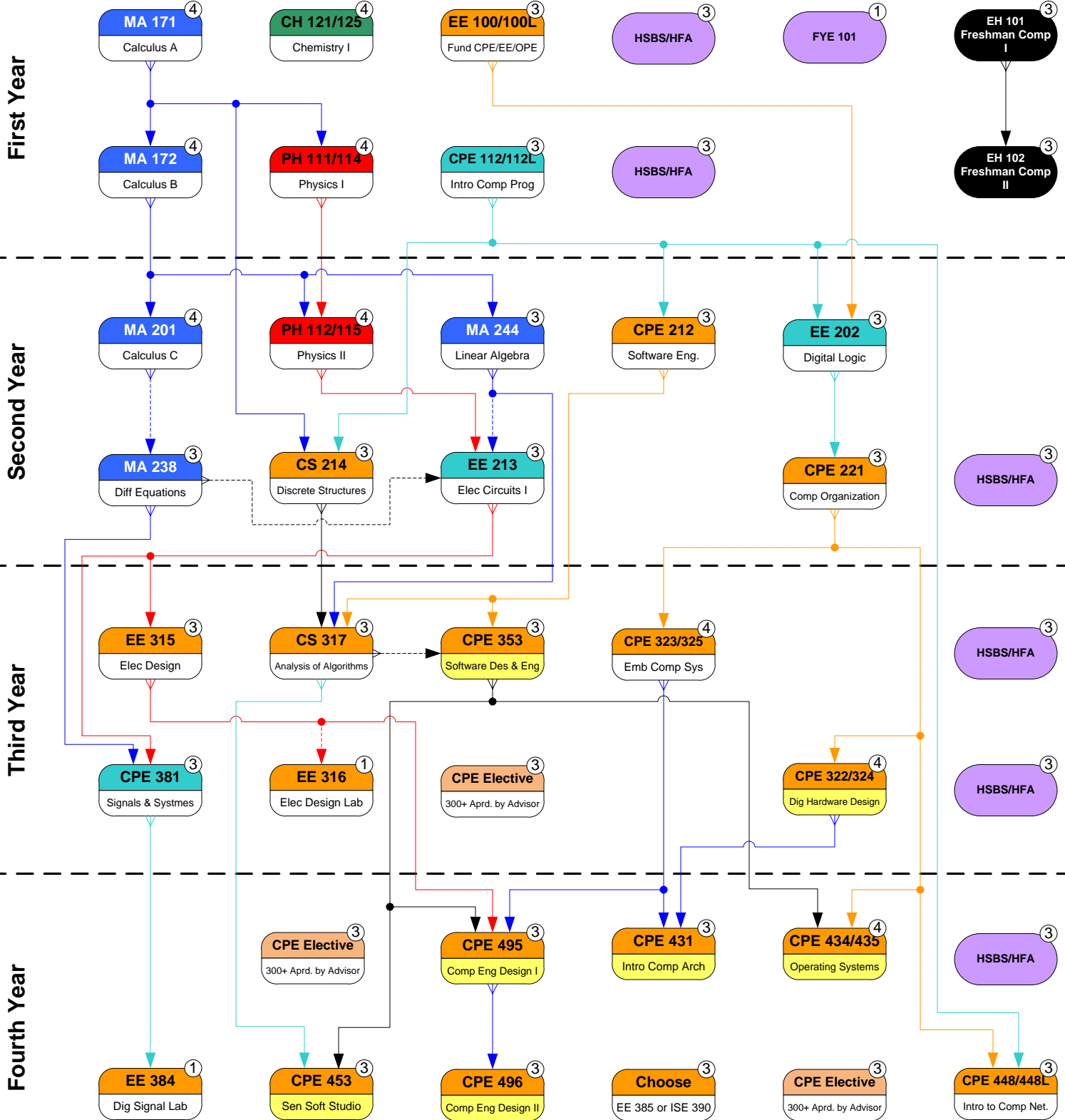
All prerequisite classes must be completed with a "C-" or higher grade.
The Catalog is the final authority for all degree requirements.



Academic Flowchart



Computer Engineering 2014/2015 (128 Hours)



Legend
Updated: 8/28/14

■ Mathematics	■ Engineering Core	■ Freshman Comp	③ Credit Hours
■ Physics	■ Computer Engineering Option	■ History, Social & Behavioral Science	→ Prerequisite
■ Chemistry / Biology	■ Electives	■ Offered only in semester listed	- - - - - Prereq w/concurrency

Academic Pathways



Computer Engineering 2014-2015 Plan

Curriculum Pathway	Research Pathway	Internship Pathway	Co-op Pathway	Required
				Recommended
Milestone Year-1				
<input type="checkbox"/> 33 hours completed including: MA 171, CH 121/125, EE 100, HSBS/HFA, FYE 101, EH 101		<input type="checkbox"/> Meet with Faculty to discuss pathway choices <input type="checkbox"/> Meet with Career Development <input type="checkbox"/> Attend Career Services Workshop on Resume <input type="checkbox"/> Outline Resume <input type="checkbox"/> Participate in Career Fair		
<input type="checkbox"/> MA 172, PH 111/114, CPE 112, HSBS/HFA, EH 102				
Milestone Year-2				
<input type="checkbox"/> 65 hours completed including: MA 201, PH 112/115, MA 244, EE 202, CPE 212		<input type="checkbox"/> Meet with Faculty for Undergraduate research opportunities <input type="checkbox"/> Attend Career Services Workshop on Interviews <input type="checkbox"/> Professional Resume <input type="checkbox"/> Attend Career Fair <input type="checkbox"/> Co-op/Internship Offer (Summer Start)		
<input type="checkbox"/> MA 238, EE 213, CS 214 CPE 221, HSBS/HFA				
SELECT ONE PATHWAY OPTION				
 Research Pathway		 Internship Pathway	 Co-op Pathway	
Milestone Year-3				
Research Pathway <input type="checkbox"/> 96 hours completed including: EE 315, CS 317, CPE 353, CPE 323, CPE 325, HSBS/HFA CPE 381, EE 316, CPE 322, CPE 324, CPE Elec, Free Elec, HSBS/HFA <input type="checkbox"/> Undergraduate Research <input type="checkbox"/> Attend JUMP Information Session		Internship Pathway <input type="checkbox"/> 96 hours completed from Curriculum Pathway <input type="checkbox"/> Summer Internship	Co-op Pathway <input type="checkbox"/> Obtain Faculty Mentor <input type="checkbox"/> 90 hours completed including: Work Semester (Summer) CPE 381, CS 317, CPE 353, CPE 323, CPE 325 (Fall) Work Semester (Spring) EE 315, EE 385/ISE 390, HSBS/HFA, HSBS/HFA (Summer) <input type="checkbox"/> 2 Semesters of Co-op	
Milestone Year-4				
Research Pathway <input type="checkbox"/> 128 hours completed including: CPE 495, CPE 434, CPE 435, CPE 431, CPE Elec, HSBS/HFA CPE 496, CPE 453, CPE 488, EE 384, CPE Elec, EE 385/ISE 390 <input type="checkbox"/> Undergraduate Research Complete <input type="checkbox"/> Senior Design Complete <input type="checkbox"/> Degree Complete <input type="checkbox"/> Begin Career or Graduate School		Internship Pathway <input type="checkbox"/> 128 hours completed from Curriculum Pathway <input type="checkbox"/> Summer Internship <input type="checkbox"/> Senior Design Complete <input type="checkbox"/> Degree Complete <input type="checkbox"/> Begin Career or Graduate School	Co-op Pathway <input type="checkbox"/> 103 hours completed including: Work Semester (Fall) CPE 322, CPE 324, CPE Elec, CPE 448, CPE 453 (Spring) Work Semester (Summer) <input type="checkbox"/> Experiential Learning complete <input type="checkbox"/> Decision on Industry or Graduate School	
Milestone Year-5				
			Co-op Pathway <input type="checkbox"/> 128 hours completed including: CPE 434, CPE 435, CPE 431, CPE Elec, CPE 495 CPE 496, CPE Elec, CPE 384, EE 316, HSBS/HFA <input type="checkbox"/> Senior Design Complete <input type="checkbox"/> Degree Complete <input type="checkbox"/> Begin Career or Graduate School	