

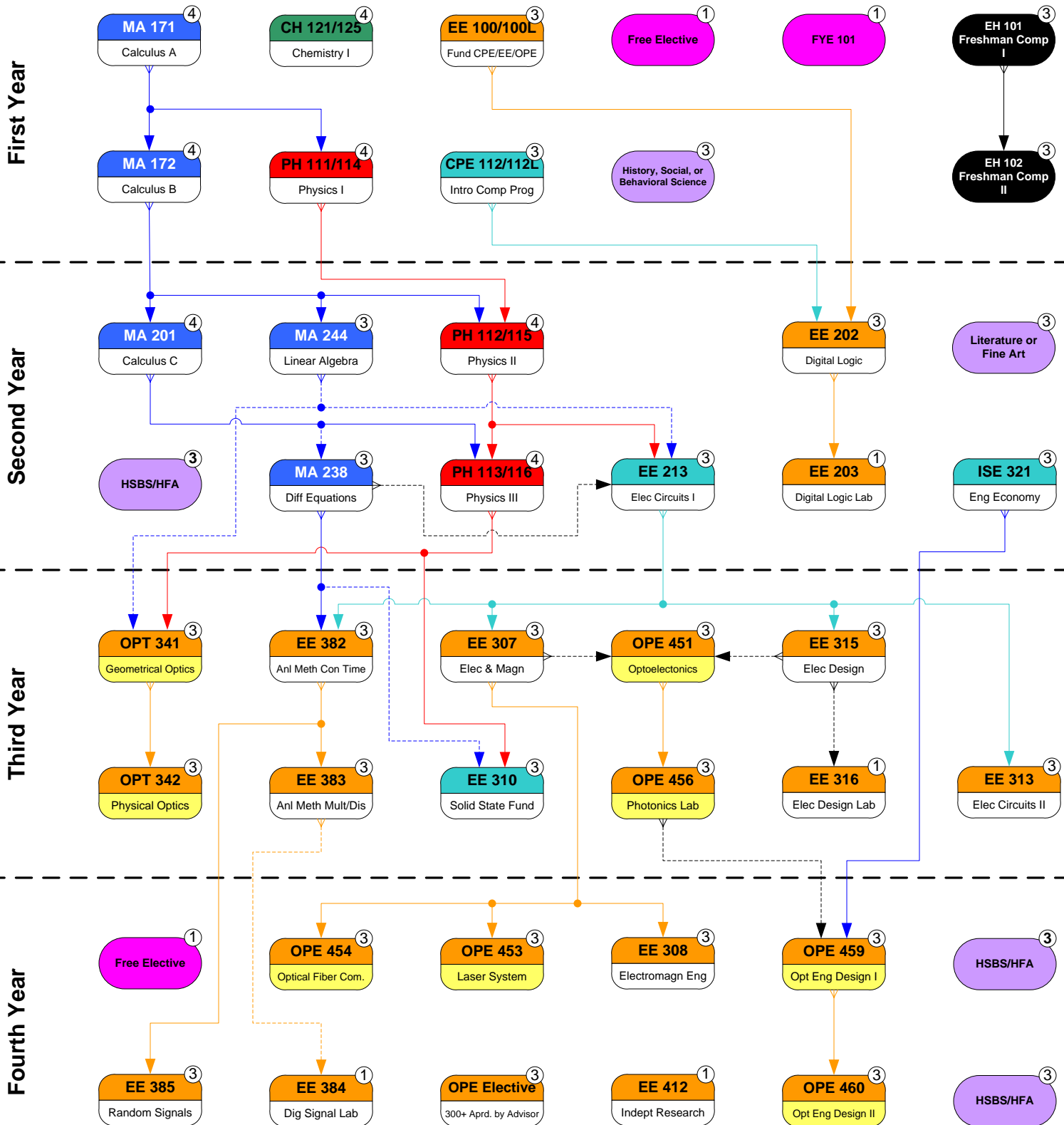
Student A#				Student Name (Last, First MI)		Offered: F=Fall S=Spring M=Summer
Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency	
English - 6 hours						
		EH 101	3	Freshman Composition I	Placement	FSM
		EH 102	3	Freshman 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 - 12 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
		PH 113	3	General Physics w/Calculus III	MA 201, PH 112, Coreq: 116	FSM
		PH 116	1	General Physics Lab III	Coreq: PH 113	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
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 213	3	Electrical Circuit Analysis I	PH 112, Prereq w/Con: MA 238 & (MA 244 or CHE 244)	FSM
		EE 310	3	Solid State Fundamentals	PH 113, Prereq w/Con: MA 238	FS
		ISE 321	3	Engineering Economy	Sophomore Standing	FSM
Electrical Engineering Requirements - 22 hours						
		EE 100	3	Fund of Computer, Electrical & Optical Eng	Prereq w/Con: MA 112, Coreq: EE 100L	FSM
		EE 202	3	Intro to Digital Logic Design	CPE 112, EE 100	FSM
		EE 203	1	Digital Logic Design Lab	EE 202	FSM
		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
		EE 382	3	Analytical Meth for Continuous Time Sys	EE 213, MA 238, MA 244	FSM
		EE 383	3	Analytical Meth for Mult and Discr Time Sys	EE 382	FSM
		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
		EE 412	1	Independent Research	Senior Standing	FSM
Optical Engineering Option - 33 hours						
**		EE 307	3	Electricity and Magnetism	EE 213	FSM
		EE 308	3	Electromagnetic Engineering	EE 307	FS
		EE 313	3	Electrical Circuit Analysis II	EE 213	FSM
		OPE 451	3	Optoelectronics	Prereq w/Con: EE 307, EE 315	F
		OPE 453	3	Laser Systems	EE 307	F
		OPE 454	3	Optical Fiber Communications	EE 307 or PH 432	F
		OPE 456	3	Photonics Lab	OPE 451	S
		OPE 459	3	Optical Engineering Design I	ISE 321, Prereq w/Con: OPE 456	F
		OPE 460	3	Optical Engineering Design II	OPE 459	S
		OPT 341	3	Geometrical Optics	PH 113, Prereq w/Con: (PH 305 or MA 244)	F
		OPT 342	3	Physical Optics	OPT 341	S
Optical Engineering Elective - 3 hours						
			3		300 - level or above approved by advisor.	

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



Academic Flowchart

Optical Engineering 2014/2015 (128 Hours)






Legend
Updated: 8/28/14

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

Academic Pathways



Optical 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"/> 67 hours completed including: MA 201, PH 112/115, MA 244, EE 202, HSBS/HFA		<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, PH 113/116, EE 213, EE 203, ISE 321, HSBS/HFA				
SELECT ONE PATHWAY OPTION				
 Research Pathway		 Internship Pathway	 Co-op Pathway	
Milestone Year-3				
Research Pathway <input type="checkbox"/> 98 hours completed including: OPE 451, EE 382, EE 315, EE 307, OPT 341 EE 313, EE 383, EE 310, OPE 456, EE 316, OPT 342 <input type="checkbox"/> Undergraduate Research <input type="checkbox"/> Attend JUMP Information Session		Internship Pathway <input type="checkbox"/> 98 hours completed from Curriculum Pathway <input type="checkbox"/> Summer Internship	Co-op Pathway <input type="checkbox"/> Obtain Faculty Mentor <input type="checkbox"/> 91 hours completed including: Work Semester (Summer) OPT 341, OPE 451, EE 307, EE 315 (Fall) Work Semester (Spring) EE 382, EE 310, EE 313, HSBS/HFA (Summer) <input type="checkbox"/> 2 Semesters of Co-op	
Milestone Year-4				
Research Pathway <input type="checkbox"/> 128 hours completed including: OPE 454, OPE 453, EE 308, OPE 459, HSBS/HFA EE 385, EE 384, EE 412, OPE 460, OPE Elec, HSBS/HFA <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"/> 112 hours completed including: Work Semester (Fall) OPT 342, EE 383, OPE 456, HSBS/HFA (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: OPE 454, OPE 453, EE 308, OPE 459 EE 385, EE 384, OPE Elec, EE 412, OPE 460, EE 316 <input type="checkbox"/> Senior Design Complete <input type="checkbox"/> Degree Complete <input type="checkbox"/> Begin Career or Graduate School	