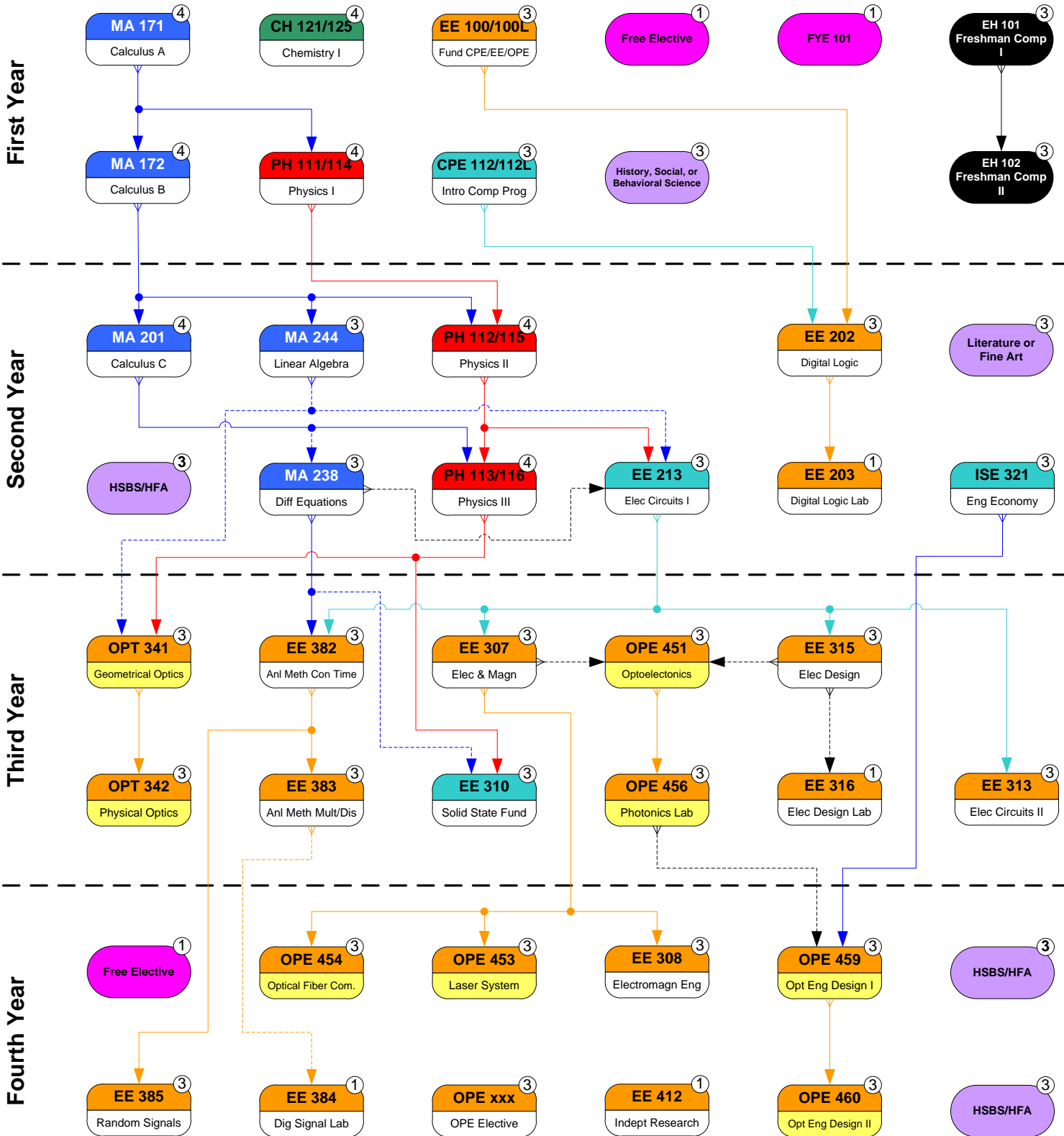


Student A#				Student Name (Last, First MI)			Offered: F=Fall S=Spring M=Summer
Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency		
<b>English - 6 hours</b>							
		EH 101	3	Freshman Composition I	Placement		FSM
		EH 102	3	Freshman Composition II	EH 101		FSM
<b>Mathematics - 18 hours</b>							
		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
<b>Chemistry - 4 hours</b>							
		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
<b>Physics - 12 hours</b>							
		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
		PH 113	3	General Physics w/Calculus III	MA 201, PH 112		FSM
		PH 116	1	General Physics Lab III	Prereq w/Con: PH 113		FSM
<b>History, Social &amp; Behavioral Sciences, Humanities &amp; Fine Arts - 15 hours</b>							
			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				
<b>General Education Electives - 3 hours</b>							
					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.		
**	Class has required lab section			<b>Engineering Core - 12 hours</b>			
**		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
<b>Electrical Engineering Requirements - 22 hours</b>							
		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		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
<b>Optical Engineering Option - 33 hours</b>							
**		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
<b>Optical Engineering Elective - 3 hours</b>							
			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.*

Updated: 7/11/2013

# Optical Engineering Program 2013/2014 (128 Hours)



**Legend**

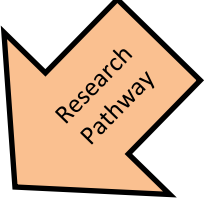

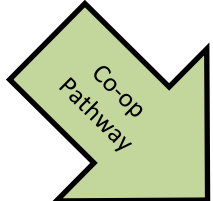
- Freshman Comp
- Mathematics
- Chemistry
- Physics
- History, Social & Behavioral Science, Humanities & Fine Arts
- Free Elective
- Engineering Core
- Optical Engineering Option
- Offered that semester only
- ③ Credit Hours
- Prerequisite
- - - - -> Prereq w/concurrency



Department	Electrical & Computer	Prepared by	Jacob Kerstiens	Date	8/8/13
Program	Optical Engineering	Approved by		Date	

# College of Engineering Pathways

## Optical Engineering 2013-2014 Plan

	Curriculum Pathway	Research Pathway	Internship Pathway	Co-op Pathway					
<b>Milestone Year-1</b>									
	<input type="checkbox"/> 33 hours completed including: MA 171, CH 121/125, EE 100, HSBS/HFA, FYE 101, EH 101, Free Elec		<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						
	MA 172, PH 111/114, CPE 112, HSBS/HFA, EH 102		<input type="checkbox"/> Outline Resume <input type="checkbox"/> Participate in Career Fair						
<b>Milestone Year-2</b>									
	<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						
	MA 238, PH 113/116, EE 213, EE 203, ISE 321, HSBS/HFA		<input type="checkbox"/> Attend Career Fair <input type="checkbox"/> Co-op/Internship Offer (Summer Start)						
									
<b>Milestone Year-3</b>									
	<b>Research Pathway</b> <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		<b>Internship Pathway</b> <input type="checkbox"/> 98 hours completed from Curriculum Pathway <input type="checkbox"/> Summer Internship		<b>Co-op Pathway</b> <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				
	<b>Research Pathway</b> <input type="checkbox"/> 128 hours completed including: OPE 454, OPE 453, EE 308, OPE 459, Free Elec, 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		<b>Internship Pathway</b> <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		<b>Co-op Pathway</b> <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				
<b>Milestone Year-4</b>									
	<b>Research Pathway</b> <input type="checkbox"/> 128 hours completed including: OPE 454, OPE 453, EE 308, OPE 459, Free Elec, 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		<b>Internship Pathway</b> <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		<b>Co-op Pathway</b> <input type="checkbox"/> 128 hours completed including: OPE 454, OPE 453, EE 308, OPE 459, Free Elec 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				
<b>Milestone Year-5</b>									
					<b>Co-op Pathway</b> <input type="checkbox"/> 128 hours completed including: OPE 454, OPE 453, EE 308, OPE 459, Free Elec 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				
	<table border="1"> <tr> <td>Required</td> <td style="background-color: yellow;"></td> </tr> <tr> <td>Recommended</td> <td style="background-color: lightblue;"></td> </tr> </table>	Required		Recommended					
Required									
Recommended									