[Electro-Optics Track, 76 - 77 credits]

Suggested Plan of Study

[Physics, Astronomy, & Engineering Science. Kevin L. Haglin, Chair]

[B. Dalton, J. Harlander]

First Semester		Second Semester	
PHYS 234	(5 cr.)	PHYS 235	(5 cr.)
Math 221	(5 cr.)	MATH 222	(4 cr.)
General Education	(5 or 6 cr.)	EE 102 or CSCI 260	(2 or 3 cr.)
		General Education	(3 or 4 cr.)
Third Semester		**Fourth Semester**	
PHYS 328	(3 cr.)	PHYS 329	(3 cr.)
[1]PHYS 333 or ENGR 332	(3 cr.)	PHYS 346	(3 cr.)
[2]MATH 312, 321, 325, or CHEM 210	(3 or 4 cr.)	[2]MATH 312, 321, 325, or CHEM 210	(3 or 4 cr.)
General Education	(5 to 7 cr.)	General Education	(5 to 7 cr.)
Fifth Semester		**Sixth Semester**	
ENGR 332 or PHYS 333	(3 cr.)	PHYS 338 or PHYS 440	(4 cr.)
PHYS 430 or PHYS 431	(2 or 3 cr.)	ENGR 334 or PHYS (400 level optics)	(3 cr.)
ENGR 447	(3 cr.)	PHYS 435 or 436	(3 cr.)
[2]MATH 312, 321, 325, or CHEM 210	(3 or 4 cr.)	[2]MATH 312, 321, 325, or CHEM 210	(3 or 4 cr.)
Seventh Semester		**Eighth Semester**	
PHYS 431 or PHYS 430	(2 or 3 cr.)	PHYS 440 or PHYS 338	(4 cr.)
[4]PHYS 445	(3 cr.)	PHYS (400 level optics) or ENGR 334	(3 cr.)
PHYS 415 or 499	(1 to 3 cr.)	PHYS 435 or 436	(3 cr.)
		PHYS 415 or 499	(1 to 3 cr.)

Notes:

The Electro-optics track requires that you complete PHYS 445 and at least six credits from PHYS 415, 435, 436; ENGR 425, 447. Discuss the selection of these electives with your physics advisor.

[1] If ENGR 332 is offered during your third semester, take it then; if it isn't then take PHYS 333. It is possible to take both ENGR 332 and PHYS 333 at the same time, but this should be discussed with a physics advisor.

[2] Select any one of the four. All are required for the major.

[4] PHYS 445 requires that PHYS 338 be completed before taking PHYS 445

Special Note on Upper division Courses. Most upper division ASTR, ENGR, and PHYS courses are offered every other year. It is important that students check with the department to determine which year and semester a specific course will be offered. The table below provides a general indication as to when upper division courses are offered, but these may change during any given semester.

Course	Semester Offered	Years Offered
ASTR 311 Solar System Astronomy	F	05, 07, 09, 11
ASTR 312 Stellar Astronomy	S	06, 08, 10, 12
ASTR 323 Observational Astronomy	F	06, 08, 10, 12
ASTR 427 Galactic Astronomy and Cosmology	S	05, 07, 09, 11
ENGR 332 Electronics	F	06, 08, 10, 12
ENGR 334 Thermodynamics	S	06, 08, 10, 12
ENGR 425 Optical Communication	S	Every year
ENGR 447 Optical Design	F	06, 08, 10, 12
PHYS 328 Modern Physics I	F, S	Every semester
PHYS 329 Modern Physics II	S	Every year
PHYS 333 Optics	F	Every Year
PHYS 338 Electromagnetic Fields	S	06, 08, 10, 12
PHYS 346 Applications in Theoretical Physics	F, S	Every semester

PHYS 415 Undergraduate Research	Arranged	
PHYS 420 Seminar	DEMAND	
PHYS 430 Advanced Physics Laboratory	F	Every year
PHYS 431 Introduction to Quantum Mechanics	F	05, 07, 09, 11
PHYS 435 Laser Optics	S	05, 07, 09, 11
PHYS 436 Advanced and Fourier Optics	S	06, 08, 10, 12
PHYS 440 Classical Mechanics	S	05, 07, 09, 11
PHYS 445 Electro-optics	F	05, 07, 09, 11