Advising Course Plan Physics Major 3 Year Plan

This advising plan shows an example of working through the requirements for the major in three years. It is appropriate for students who have already completed eight units of coursework. It is also appropriate for students working on the 3-2 Pre-Engineering Option. The student's individual academic plan will be developed in consultation with an adviser and reviewed each semester prior to registering for the next semester. This plan assumes that the student has not taken any courses for the major prior to the first semester shown in the plan.

Courses for the major that should be completed prior to the first semester of this plan: None required.

First Year

or 343

Fall		Units
PHYS 141P	University Physics I	1
MATH 130	Calculus I with Review Part I	1
or 141Q	Calculus I with Analytic Geometry	
General Education Requir	rement or Elective	1
General Educaiton Requir	rement or Elective	1
	Term Units	4
Spring		
PHYS 142P	University Physics II	1
MATH 131Q	Calculus I with Review Part 2	1
or 142Q	Calculus II with Analytic Geometry	
General Education Requir	rement or Elective	1
General Education Requir	rement or Elective	1
	Term Units	4
Summer		
MATH 142Q	Calculus II with Analytic Geometry (if not previously	1
	completed, this course should be taken in summer	
	sterm)	
	Term Units	1
Second Year		
Fall		
PHYS 243	Modern Physics	1
PHYS 352 or 356 ¹	Optics (or Elective) Electronics	1
MATH 243Q	Calculus III with Analytic Geometry	1
PHYS 380	Physics Colloquium	0.0
General Education Requirement or Elective		1
	Term Units	4
Spring		
PHYS 304	Mathematical Methods in Physics	1
PHYS 312	Laboratory Techniques	1
PHYS 322, 332,	Mechanics I	1
or 343	Electricity and Magnetism	
	Quantum Mechanics I	
PHYS 497	Senior Project Proposal	0.5
PHYS 380	Physics Colloquium	0.0
	Term Units	3.5
Third Year		
Fall		
PHYS 322, 332,	Mechanics I	1

Electricity and Magnetism Quantum Mechanics I

	Term Units	3.5
or 141	Introduction to Computer Science I	
CSCI 261	Data Science I	1
PHYS 380	Physics Colloquium	0.0
PHYS 499	Senior Seminar	0.5
PHYS 412 ¹	Advanced Laboratory Techniques (or Elective)	1
	Quantum Mechanics I	
or 343	Electricity and Magnetism	
PHYS 322, 332,	Mechanics I	1
Spring		
	Term Units	4
General Education Re	quirement or Elective	1
PHYS 380	Physics Colloquium	0.0
PHYS 498	Senior Project	1
or 356 ¹	Electronics	
PHYS 352	Optics (or Elective)	1

Total Unit: 24

One lab course selected from PHYS 352, PHYS 356, or PHYS 412 is required for the major, the others may be taken as general electives.