

Engineering Physics

Courses required for the first year:

Fall – ENGR-190, MATH-160, or MATH-140, according to placement
Spring - PHYS-211, MATH-160 if not taken in fall

Courses recommended for the first year:

J-term - PHYS-200
Spring - MATH-220 (2 credits)

Contact: Dr. Nathan Frank

The Major in Engineering Physics

(A minor in Engineering Physics is not offered. Students may not also major in physics or get a BS in general engineering.)

Required Courses

Course Number	Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
ENGR-190	Intro to Design			F, SP	4
PHYS-200	Modeling and Simulation		MATH-140	F/J/SP	4
PHYS-211	Foundational Physics I	PN	MATH-160 (or co-requisite)	SP	4
PHYS-212	Foundational Physics II	PN	PHYS-211 & MATH-260 (co-requisite)	F	4
PHYS-213	Foundational Physics III		PHYS-211 & MATH-260	SP	4
PHYS-366	Advanced Numerical Techniques		PHYS-213 and PHYS-200	F	2
PHYS-368 or PHYS-367 and PHYS-421 (SI)	Advanced Experimental Design (SI)		PHYS-366	SP	2
300-400 level PHYS, ENGR, or CHEM courses	based on advising (excluding ENGR-315/ENGR-315A)				10

Required Supporting Courses

Course Number	Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
MATH-160	Calculus			F/SP	4
MATH-220	Integration Methods		MATH-160	F/SP	4
MATH-260	Multivariable Calc		MATH-160	F	4

Additional Recommended Courses

Course Number	Course Name	Learning Perspective/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
CHEM-131	General Chemistry I	PN		F/SP	4
MATH-320	Differential Equations		MATH-220	SP	4

Major Overview

- Students in Engineering Physics typically go into the engineering industry or onto graduate school in engineering.
- This major is a good option for students who want to double-major while including engineering.
- We recommend meeting with the engineering advisor ASAP to map out a course plan.

*Fall, J term, Spring, Summer; see [Academic Calendar](#) for specific dates

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