

Engineering Physics

Courses required for the first year: Fall - Engr 190, Math 160; Spring - Math 220 & Math 230, Phys 211

Courses encouraged for the first year: Chem 131

Contact: Dr. Joshua M. Dyer

The Major in Engineering Physics

(A minor in Engineering Physics is not offered. Students may not also major in Physics)

Required Courses

Course Number	Course Name	Learning Perspective	Prerequisites	Credits
<u>Engr 180 or 190</u>	<u>Intro to Design</u>			<u>2 or 4</u>
<u>Phys 211</u>	<u>Foundational Physics I</u>	<u>PN</u>	<u>Math 160</u>	<u>4</u>
<u>Phys 212</u>	<u>Foundational Physics II</u>	<u>PN</u>	<u>Math 220</u>	<u>4</u>
<u>Phys 213</u>	<u>Foundational Physics III</u>		<u>Math 220 & Math 260</u>	<u>4</u>
<u>Phys 366</u>	<u>Advanced Lab I</u>		<u>Phys 213</u>	<u>2</u>
<u>Phys 368</u>	<u>Advances Lab II (SI)</u>		<u>Phys 366</u>	<u>2</u>
<u>Engr 375</u>	<u>Engineering Design</u>		<u>Engr 190</u>	<u>4</u>
<u>Engr 310 & Phys 360 OR</u>	<u>Engineering Statics & Classic Mechanics</u>		<u>Phys 211</u> <u>Phys 211, 212, and Math 260</u>	<u>2 & 4</u>
<u>Phys 339 & Phys 377 OR</u>	<u>Electronics & Electricity and Magnetism</u>		<u>Phys 212</u> <u>Phys 211, 212, and Math 260</u>	<u>4 & 4</u>
<u>Chem 132 & Chem 321</u>	<u>General Chemisry II & Organic Chemistry I</u>		<u>Chem 131,</u> <u>Chem 132 or 235</u>	<u>4 & 4</u>

Additional Courses (* Required Supporting Courses)

Course Number	Course Name	Learning Perspective	Prerequisites	Credits
<u>Chem 131*</u>	<u>General Chemistry I</u>	<u>PN</u>		<u>4</u>
<u>Math 160*</u>	<u>Calculus</u>			<u>4</u>
<u>Math 220*</u>	<u>Integration Methods</u>		<u>Math 160</u>	<u>4</u>
<u>Math 260*</u>	<u>Multivariable Calc</u>		<u>Math 160</u>	<u>4</u>
<u>Math 250</u>	<u>Discrete Mathematics</u>		<u>Math 160</u>	<u>4</u>
<u>Math 320</u>	<u>Differential Equations</u>		<u>Math 220</u>	<u>4</u>
<u>Math 350</u>	<u>Linear Algebra</u>		<u>Math 250</u>	<u>4</u>
<u>CSC 201</u>	<u>Intro to Computer Science</u>			<u>4</u>

Major Overview

-Students in Engineering Physics typically go into engineering industry or onto graduate school in engineering.

- A Study Abroad program of interest to engineers that travels to the Alps is offered in spring term of odd years.
- We recommend meeting with the engineering advisor ASAP to map out a course plan.

Updated (4/2021)