Augustana College

Engineering Physics

Courses required for the first year: Fall - Engr 190, Math 160; Spring – Phys

Courses recommended for the first year: Phys 200 (J-term), Spring - Math 220 & Math 230

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/ Suffix	Prerequisites	Usually offered: F, J, SP, SU*	Credits
Engr 180 or 190	Intro to Design			F	2 or 4
Phys 211	Foundational Physics I	PN	Math 160 (or co-requisite)	SP	4
Phys 212	Foundational Physics II	PN	Math 220 (or co-requisite) & Math 260 (co- requisite)	F	4
Phys 213	Foundational Physics III		Phys 211, Math 220 & Math 260	SP	4
Phys 366	Advanced Lab I		Phys 213	F	2
Phys 368	Advances Lab II (SI)		Phys 366	SP	2
Engr 310 & Phys 360 OR	Engineering Statics & Classic Mechanics		Phys 211 Phys 211,212, and Math 260	SP & SP	2 & 4
Phys 339 & Phys 377 OR	Electronics & Electricity and Magnetism		Phys 212 Phys 211, 212, and Math 260	SP & F	4 & 4
Chem 132 & Chem 321	General Chemisry II & Organic Chemistry I		Chem 131, Chem 132 or 235	F/SP & F	4 & 4

Required Supporting 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 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
Math 320	Differential Equations		Math 220	SP	4
CSC 201	Intro to Computer Science			F/SP	4

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 and carries PH and PA perspectives is offered in spring term of odd years.
- We recommend meeting with the engineering advisor ASAP to map out a course plan.

Updated December 2022

^{*}Fall, J term, Spring, Summer; see <u>Academic Calendar</u> for specific dates