# Augustana College

## **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)

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## **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 190	Intro to Design			F	4
Phys 200	Modeling and Simulation		Math 140	F/J	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-315/315A)				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.
  - A Study Abroad program of interest to engineers that travels to the Alps and carries PH and PA perspectives is offered in the spring term of odd years.
- We recommend meeting with the engineering advisor ASAP to map out a course plan.

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<sup>\*</sup>Fall, J term, Spring, Summer; see <u>Academic Calendar</u> for specific dates