Lower-Division Major Requirements

The courses below are specifically related to your field of study and are part of the requirements for graduation in your major:

- Calculus-based Physics I: Mechanics (with lab)
- Calculus-based Physics II: Electromagnetism (with lab)
- Calculus-based Thermodynamics and Modern Physics (with lab)
- Calculus-based Oscillatory Motion and Waves
- Calculus I
- Calculus II
- Calculus III
- Differential Equations AND Linear Algebra OR Mathematical Methods in Physics course
- General Chemistry I (with lab)
- General Chemistry II (with lab)
- Introduction to Computer Science

Advising Notes

While different schools may pair up the topics differently, it is important for the students to have adequate and in-depth coverage of mechanics, electricity, magnetism, waves, thermodynamics, and modern physics to begin their junior level courses. Some colleges use a two or three semester physics sequence in place of the four semester sequence. In such cases, some additional courses may be needed after transferring.
General Education Courses are related to key academic disciplines and may be outside your field of study. To earn a SUNY AA/AS or bachelor’s degree, you must earn 30 credits in at least seven of the following ten skill areas, and demonstrate two competencies.

**Skill Areas:**

- Basic Communication (required)
- Mathematics (required)
- American History
- Other World Civilizations
- Foreign Language
- Social Sciences
- Humanities
- The Arts
- Natural Sciences
- Western Civilization

**Competencies:**

- Critical Thinking (required)
- Information Management (required)

General Education requirements vary by campus and by major. However, if you satisfy the SUNY General Education Requirement (SUNY-GER) area at one campus with a grade of C or higher, you will have met that SUNY-GER area at every other SUNY campus. Visit [Campus Requirements](#) to determine the skill areas required by each campus and the courses available within those areas.

*Note: The lower division major requirements outlined in this document will be implemented for SUNY students entering Fall, 2015. Check with your campus advisor for more information regarding current requirements.*

*Last updated: April, 2014*