



The State University  
of New York

## Transfer Path

### Discipline: Nanoengineering

SUNY transfer paths outline the knowledge and skills that are essential for students to complete during their first two years of study for a major in a given discipline. The coursework described below will meet degree requirements at all SUNY campuses offering majors in the above discipline. If you complete this coursework successfully, you will be well-positioned to finish your degree with an additional two years of study at your SUNY transfer college.

Use this transfer path to discover both courses related to your major and general education requirements that will prepare you for transfer. Click on each course to view a course description. Then, to map your first two years of courses, visit [Planning Your Coursework](#).

### 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:

#### *Engineering Core Requirements:*

- [Introduction to Engineering](#)
- [Calculus-based Physics I: Mechanics \(with lab\)](#)
- [Calculus-based Physics II: Electromagnetism \(with lab\)](#)
- [Calculus I](#)
- [Calculus II](#)
- [Calculus III](#)
- [General Chemistry I \(with lab\)](#)
- [Differential Equations](#)
- [Computer Programming](#)

#### *Specific requirements for Nanoengineering:*

- [Electronics I](#)
- [Linear Algebra](#)
- [General Chemistry II \(with lab\)](#)



## Advising Notes

For articulated courses, differences in credit hours should not matter. For example, if a 3 credit hour math course at a community college is articulated with a 4 credit hour course at a four-year institution, students are credited with satisfying the 4 credit-hour requirement.

There may be additional courses in your major which would transfer, or courses which could be substituted for one of the above. These may be established on a case by case basis. Please see an advisor at your transfer campus to explore those options.

Transfer students must satisfy 5 of the 10 SUNY GER areas outlined on the following page. With Mathematics and Natural Sciences satisfied by Engineering Core and Discipline Specific Requirements, at least three additional areas must be satisfied. One of the SUNY GER areas covered must be Basic Communications. Students may need to take additional General Education courses depending on the requirements of the transfer institution.

## General Education Requirements

General Education courses are related to key academic disciplines and may be outside your field of study. To earn a SUNY bachelor's degree, you must earn 30 credits in at least seven of the following ten skill areas, and demonstrate two competencies. For AS programs in Engineering, students must satisfy five of the following ten skill areas.

### **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.