

2024 High School Course Suggestions Engineering

Below are options for students taking their first undergraduate courses at UC Santa Cruz. All courses are 5 credits unless otherwise indicated. Session dates and deadlines are found on our [academic calendar](#).

Engineering majors and programs vary widely but typically include an interdisciplinary study of math, science, and some business principles. Students who study general engineering take a wide range of courses in math, natural and physical sciences, computers, and even art. Having a solid foundation in any of these areas may allow you to take more advanced classes in college, and courses in different topic areas can prepare you with a broad academic background.

Foundational Courses: Session 1 - June 24 - July 26

- [Online] Mathematical Methods for Engineers I - [AM 10](#). If you have passed high school geometry, any UC Santa Cruz Summer Session math course will meet the (C) Mathematics A-G requirement.
- [In Person] Statistics - [STAT 5](#). If you have passed high school geometry, any UC Santa Cruz Summer Session math course will meet the (C) Mathematics A-G requirement.

Mathematics

- We offer many [MATH](#) classes - we are happy to help you select the right level.
- If you have passed high school geometry, any UC Santa Cruz Summer Session MATH course will meet the (C) MATHematics A-G requirement.

Lower Division [MATH Overview](#) (course numbers less than 100)

- [MATH 2](#) is College Algebra, [MATH 3](#) is Precalculus.
- [MATH 11A](#) is Calculus with Applications 1, and [MATH 11B](#) is Calc 2.
- [MATH 19A](#) is Calculus for the Sciences, and [MATH 19B](#) is Calc 2.
- [MATH 21](#) is Linear Algebra
- [MATH 22](#) is an Introduction to Calculus of Several Variables.
- [MATH 23A](#) and [MATH 23B](#) are Vector Calculus 1 and 2.
- [MATH 24](#) is Ordinary Differential Equations

While visiting high school students are not required to show proof of prerequisites for MATH courses, it is always in your best interest to have met them.

Expanded Options for Students Interested in these Fields:

- [Online] Introduction to New Media and Digital Artmaking - [ART 20K](#) [meets the (F) Visual and performing arts A-G requirement]
- [In Person] Metal Fabrication - [ART 183](#) [meets the (F) Visual and performing arts A-G requirement]
- [In Person] - Introduction to Printmaking & Drawing - [ART 20G](#) [meets the (F) Visual and performing arts A-G requirement]
- [Online] Digital Tools for Contemporary Art Practice - [ART 80T](#) [meets the (F) Visual and performing arts A-G requirement]
- [Online] The Physical and Chemical Environment - [ENVS 23](#) [meets one year of the (D) Science A-G requirement]