# **The Engineering Common Curriculum**

## Consists of roughly 75 credits. Is called the “common” core because all students have to complete these requirements in order to graduate.

## **It includes:**

## Mathematics

## Science

## Computing

## Engineering Distribution

## First-Year Writing

## Liberal Studies

## Engineering Communications

## Advisor-Approved Electives

## **Engineering Mathematics:**

## MATH 1910: Calculus for Engineers

## MATH 1920: Multivariable Calculus for Engineers

## MATH 2930 or MATH 2940: Differential Equations or Linear Algebra for Engineers

## and a math course chosen by the major

## **Science:**

## CHEM 2090: Engineering General Chemistry

## PHYS 1112: Mechanics and Heat

## PHYS 2213: Electromagnetism

## and a science course chosen by the major

## Intro to Biology courses are required as fourth science for BE and BME majors

## **Computing:**

## CS 1110: Introduction to Computing Using Python

## CS 1112: Introduction to Computing Using Matlab

## **Engineering Distribution:**

## ENGRI: Introduction to Engineering

## ENGRD: Engineering Distribution course required by the major

## ENGRD: Engineering Distribution course of your choice from different category

## **First-Year Writing:**

## Two seminar courses required

## **Liberal Studies:**

## At least six courses (totaling at least 18 credits) from at least three different Groups. At least two courses must be at the 2000 level or higher. No more than two courses may be chosen from Group 6.

## Group 1: Cultural Analysis, Literature and the Arts, Social Differences

## Group 2: Historical Analysis

## Group 3: Ethics, Cognition, and Moral Reasoning

## Group 4: Social Science and Global Citizenship

## Group 5: Foreign Languages

## Group 6: Communications in Engineering

## **Engineering Communications:**

## An Engineering Communications course can be chosen from six possible ways and can count as either an ENGRD, Liberal Studies, Major course, or an Advisor-Approved Elective, depending on the course chosen. Consult the Engineering Undergraduate Handbook for more information.

## **Advisor-Approved Electives:**

## Six credits of electives approved by your faculty advisor.

## In addition to the common core, students complete at least 48 more credits toward their major curriculum.

## **First-Year Requirements:**

## By the end of the first year, engineering students are expected to have successfully completed (or received credit for):

## MATH 1910 and MATH 1920;

## Two sciences;

## One of CS 1110 or CS 1112;

## One introduction to engineering course (ENGRI)

## Two physical education (PE) courses and the university swim test

## **For More Information:**

## Consults the [Engineering Undergraduate Handbook](https://www.engineering.cornell.edu/students/undergraduate-students/curriculum/engineering-undergraduate-handbook).

## **Thank you!**

## Engineering Advising