



WHO WE ARE

Engineering at Notre Dame combines technical inquiry with a creative bent. Our goal is to create novel methods of using and producing materials, components, devices, and systems, *developing innovations that can improve health, wellbeing, and quality of life for all persons.*

Consistent with the University's Catholic mission and heritage, the College of Engineering's mission is founded on the principle that *the creation and transfer of knowledge should reflect a profound and complete respect for the dignity of all persons and for the greater common good of humanity.* Graduates of the College are extremely capable and competent in their particular fields, yet they also develop a deep sense of the world and how engineers can use their expertise to make it a better place.

MAJORS

- Aerospace Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Environmental Earth Sciences
- Environmental Engineering
- Mechanical Engineering

MINORS

- Bioengineering
- Computational Engineering
- Energy Engineering
- Energy Studies
- Engineering Corporate Practice
- Environmental Earth Sciences

CONCENTRATIONS

Aerospace and

Mechanical Engineering

- Aerospace
(Mechanical Engineering majors only)
- Bioengineering
- Computational Engineering
- Control and Mechanical Systems
- Design and Manufacturing
- Energy
- Materials
- Solid Mechanics
- Thermal and Fluid Sciences

CONCENTRATIONS, CONT.

Chemical and Biomolecular Engineering

- Biomolecular Engineering
- Energy
- Materials

Civil and Environmental Engineering and Earth Sciences

- Hydraulics
(Civil Engineering majors only)
- Structures (Civil Engineering majors only)

Computer Science and Engineering

- Bioinformatics and Computational Biology
- Cybersecurity
- Cloud Computing
- Media Computing
- Mobile Computing

Electrical Engineering

- Biosystems
- Communications
- Energy
- Multimedia
- Semiconductors and Nanotechnology

Dual Degree Programs

- Engineering/Arts and Letters
- Engineering/M.B.A.
- Engineering/Science
- 3-2 and 4-1 dual degree programs
with partner schools



CORE COLLEGE OF ENGINEERING REQUIREMENTS

In addition to the Core University Requirements, students in the College of Engineering complete a Basic Science Core totaling 33 credit hours, including:

- Calculus I
- Calculus II
- Calculus III
- Introduction to Linear Algebra and Differential Equations
- General Chemistry: Fundamental Principles
- General Physics I
- General Physics II
- Introduction to Engineering Systems I and II

CORE UNIVERSITY REQUIREMENTS

- Writing and Rhetoric: 1 course
- Mathematics: 2 courses
- Natural Science: 2 courses
- History: 1 course*
- Social Science: 1 course*
- Theology: 2 courses*
- Philosophy: 2 courses*
- Fine Arts or Literature: 1 course*
- Moreau First Year Experience: 2 courses

*One of these requirements must be a University seminar.

ENROLLMENT

1902

Undergraduate Students

531

Graduate Students

DISTINGUISHING FACTORS

- After graduation:
 - Seventy percent of Notre Dame engineering graduates choose full-time employment upon graduation, and many are offered and accept positions prior to Commencement Ceremonies.
 - Fifteen percent attend graduate or professional school.
 - Ten percent pursue military careers.
 - Five percent join service programs.
- Approximately 98 percent of Notre Dame engineers pass the Fundamentals of Engineering exam, compared to 74 percent nationally.
- Semester-long Study Abroad programs include Santiago, Chile; Cairo, Egypt; London, England; Dublin, Ireland; and Puebla, Mexico. Summer abroad engineering programs are available in Beijing, China; London, England; Dublin, Ireland; Rome, Italy; and Alcoy, Spain. Engineering students may also choose to study for an entire academic year in Dublin, Ireland.
- The Engineering Honors Program (EHP) is designed for juniors and seniors conducting research with the intent of completing a senior thesis.
- The Engineering Scholars Program (ESP) is a group of approximately twenty of the most talented sophomores and freshmen in the College of Engineering who facilitate discourse among classes while encouraging intellectual depth and companionship among potential Engineering Honors Program members. First-year students in the Engineering Scholars Program enroll in honors humanities and engineering courses.

