CIVIL ENGINEERING MAJOR (B.S.)

Accreditation

The Civil Engineering Program is accredited by the Engineering Accreditation Commission(s) of ABET, under the General Criteria and the Program Criteria for Civil Engineering and similarly named engineering programs.

Purpose

The Bachelor of Science in Civil Engineering major provides a broad spectrum of foundational principles and practical and technical skills from a Christian worldview perspective. The program focuses on construction, geotechnical, structural, and transportation technical areas. The program prepares graduates for the thoughtful integration of work and life and to view the Civil Engineering profession as a lifelong commitment to serving others.

Engineering Program Learning Outcomes

The student will demonstrate:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Program Educational Objectives

Our goal is, within a few years of graduating, our Civil Engineering students will be able to:

1. Integrate creativity, ethics, faith and profession consistent with Christian principles.
2. Continually improve and learn in an ever-changing technologically-advancing culture.
3. Understand and solve problems in an efficient and effective manner based on requirements.
4. Listen with an open mind and communicate effectively as a team member across various audiences and platforms (e.g., oral, written, visual).
5. Produce validated, quality work within acceptable tolerances and adhere to appropriate codes and standards.
6. Attain relevant, specific certifications and licensures.

Programs of Study
Delivery Format: Residential and Online

- Civil Engineering (B.S.) - Online
- Civil Engineering (B.S.) - Resident

Career Opportunities

- Construction Engineer
- Geo-technical Engineer
- Transportation Engineer
- Project Engineer
- Environmental Engineer