

# MECHANICAL ENGINEERING MAJOR (B.S.)

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## Purpose

The Mechanical Engineering degree is designed to develop Christ-centered men and women with the values, knowledge, and skills essential to positively influence mechanical engineering-related industries in the current and evolving economy. The program prepares graduates for the thoughtful integration of work and life and to view the mechanical 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 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 Outcomes

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

1. Be recognized as creative thinkers and emerging leaders in engineering; exhibiting an aptitude for continuous improvement.
2. Display professional ethics and behavior consistent with foundational Christian principles.
3. Be an invested, contributing, core team member with a focus on customers and a sense for business and innovation.
4. Be an effective communicator for interfacing with diverse audiences.
5. Conduct appropriate checks to produce quality engineering work within acceptable tolerances.

## Program of Study

### Delivery Format: Residential Only

- Mechanical Engineering (B.S.) - Resident

## Career Opportunities

- Mechanical Engineer
- Mechanical Systems Engineer
- Mechanical Design Engineer
- Materials/Manufacturing Engineer
- Mechanical Project/Process/Product Engineer
- Energy Systems Engineer
- Robotics/Automation/Controls Engineer