

WKU Program in Mechanical Engineering

Mission Statement

The Mechanical Engineering program produces graduates who are well prepared for the start of productive, successful careers as practicing engineers. Our graduates will have a strong competitive advantage with their unique background of engineering fundamentals combined with practical knowledge and experience.

The Mechanical Engineering program will provide a project-based, learner-driven environment relevant to the needs of our region. In support of this learning environment, the professional engineering activities of the faculty will create opportunities for the students to practice the art and science of contemporary Mechanical Engineering.

Program Educational Objectives

Within a few years of completing the Mechanical Engineering Program a graduate will:

- Either be contributing to their region's economic development through employment in mechanical engineering or related professions, or pursuing advanced credentials
- Occupy leadership roles in their profession, or in their communities, as their career develops
- Demonstrate professionalism on diverse teams across a range of varied responsibilities
- Be proactive in their professional development and engage in the continuing education needed to maintain and enhance their career

Student Outcomes

1. Mechanical Engineering graduates have an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. Mechanical Engineering graduates have 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.
3. Mechanical Engineering graduates have an ability to communicate effectively with a range of audiences.
4. Mechanical Engineering graduates have an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgements, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. Mechanical Engineering graduates have 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.
6. Mechanical Engineering graduates have an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions.
7. Mechanical Engineering graduates have an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.