

MECHANICAL ENGINEERING TECHNOLOGY, B.S. (BEHREND)

Begin Campus: Any Penn State Campus

End Campus: Erie

Program Description

This major may be taken either as a four-year baccalaureate program or in a "2+2" degree format. The latter allows graduates of associate degree programs in mechanical engineering technology or related areas to gain greater breadth and depth of knowledge in mechanical engineering technology. The baccalaureate program emphasizes applied design and analysis, complementing a hands-on manufacturing and materials focus. The graduate gains valuable knowledge of total manufacturing processes ranging from applied design to manufacture.

This major includes instruction in materials engineering, thermodynamics, heat transfer, hydraulics, finite-element analysis, and use of parametric solids modeling design packages, as well as supporting course work in mathematics and science. Oral and written communications are stressed, as is the ability to work within a team-oriented environment. The major culminates with a capstone design project involving an actual design or manufacturing problem sponsored by regional industry. This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org (<http://www.abet.org>).

Graduates have qualified for careers in a wide variety of industries that manufacture or use mechanical systems. Careers include positions in applied product design, manufacturing process development, field service support, supervision of manufacturing facilities, tool and die design, quality control, plant supervision and management, and technical sales.

What is Mechanical Engineering Technology?

Mechanical engineering technology is the application of engineering and technology principles for the creation of products and mechanical systems. It emphasizes applied design and analysis of engineering systems and materials. Mechanical engineering technology differs from mechanical engineering in that its focus is the practical application and implementation of engineering principles as opposed to theoretical development and exploration of those principles.

You Might Like This Program If...

- You like working with your hands.
- You are interested math, physics, and mechanical systems.
- You find complex problems exciting.
- You enjoy working on team-based projects.