

BS in ENGINEERING TECHNOLOGY - MECHANICAL Concentration

A. Program Educational Objectives

Program Educational Objectives – Bachelor of Science in Engineering Technology

1. Graduates manage projects from problem identification to hands on implementation.
2. Graduates function effectively on teams and communicate effectively in spoken, written, and graphical forms.
3. Graduates are proficient in the use of engineering technologies as tools to solve real world problems.
4. Graduates recognize professional, ethical, and social issues in practice.
5. Graduates demonstrate a commitment to quality and dependability.
6. Graduates stay current professionally.

Program Educational Objectives - Concentration in Mechanical Engineering Technology

7. Graduates create solutions using mechanical technology and provide leadership in solving industrial problems.
8. Graduates design mechanical products from component to systems level. They will be able to perform basic calculations and detailed design work, to work concurrently with manufacturing experts, and to take safety, quality, and maintenance concerns into account.

B. Student Outcomes

Student Outcomes – Bachelor of Science in Engineering Technology

1. Students have the ability to design solutions for comprehensive engineering problems and support in the design of discipline specific systems and processes by using advanced knowledge and skills of contemporary mathematics, science, engineering and technology.
2. Students have the ability to communicate information in written, oral, and graphical forms as well as use technical literature.
3. Students have the ability to perform experiments, analyze and interpret results using test equipment and productivity software; and
4. Students have the ability to work as a team to deliver results in a timely manner.

Student Outcomes - Concentration in Mechanical Engineering Technology. In addition to the outcomes stated above, mechanical concentration graduates will demonstrate the following:

5. Students demonstrate the ability to use design software to create drawings and models of parts and assemblies, and use the concept of geometric dimensioning and tolerancing.
6. Students demonstrate knowledge of materials and principles of mechanics in machine design applications at the component and system level, and an understanding of manufacturing, maintenance, safety, and other related issues.
7. Students demonstrate knowledge of thermal, fluid, and electrical systems including design calculation.