

BS in ENGINEERING TECHNOLOGY - ELECTRICAL 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 Electrical Engineering Technology

7. As project team members, graduates recognize opportunities and create solutions using electronics technology in a wide range of applications and provide leadership in developing solutions to industrial problems.
8. Graduates with specialized backgrounds in electronics design and implement systems for communication, control, and other applications to meet needs in the workplace.
9. Graduates with specialized backgrounds in robotics design and integrate automated cells for industrial applications.

B. Student Outcomes

Student Outcomes – Bachelor of Science in Engineering Technology

1. Students analyze problems, plan and conduct tests, interpret and use test results to develop solutions.
2. Students create and implement solutions integrating people, productivity software and equipment.
3. Students communicate information in written, oral, and graphical forms.
4. Students work as a team to deliver results in a timely fashion.
5. Students recognize the importance of quality and the need for continuous improvement.
6. Students are aware of ethical, social, environmental, diversity issues, globalization, and the need for lifelong learning.

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

7. Students have the ability to use mathematics at the level of basic calculus, statistics, and physics, as well as knowledge of analog and digital electronics in the design, construction, and testing of circuits involved in control, communication, and other electronic systems.
8. Students create solutions, manage projects, analyze, design, operate, and maintain electrical systems for industrial applications.
9. Students have the ability to manage projects, analyze, design, implement, and maintain automation systems at the levels of individual robots, work-cells, and other electrical systems.