

Electronics Technology Program Level Student Learning Outcomes

Students completing the Electronics Technology Program will be able to:

1. Demonstrate an understanding of proper safety techniques for all types of circuits, components, and industry related tools and test equipment.
2. Perform electronic fabrication and assembly using acceptable industry practices.
3. Identify common electronic components, devices, and symbols.
4. Demonstrate an understanding of the interpretation and creation of electronic schematics, technical drawings and flow diagrams.
5. Communicate effectively both orally through technical presentations and in writing through various technical reports that document work projects, procedures, test results, and equipment failures.
6. Demonstrate an ability to select and apply knowledge of mathematics, science, and technology related to electronics that require the application of principles and applied procedures.
7. Demonstrate the ability to locate and use appropriate technical literature.
8. Conduct tests to analyze and troubleshoot electronics circuits using common electronics test equipment.
9. Analyze basic DC, AC, analog and digital circuits at the component level using various circuit simplification and analysis techniques.
10. Demonstrate an understanding of analog and digital communication principles and systems including wireless and hardwired systems.
11. Demonstrate an understanding of programmable devices and principles of logic by creating and modifying existing programs for PLC and microprocessor applications.
12. Demonstrate an understanding of the components of an industrial control system to include A/D and D/A conversion, sensory devices, control devices, and basic control system circuitry.
13. Demonstrate how to use, setup, and maintain personal computers and computer network systems.
14. Solve technical problems individually and collaboratively as a member of a team.