

Industrial Electrical Principles

Award: Certificate

Length: A full-time student may complete this program in three semesters which will include one summer term

Purpose: The purpose of the Industrial Electrical Principles and Industrial Electronic Principles Certificate Programs is to train industrial workers who have the need or desire to keep up with occupational requirements or to learn a necessary skill in the Electrical-Electronic field.

Program Outcomes:

Upon successful completion of this program, students will be able to:

- Design, draw, construct, analyze, and troubleshoot basic series and parallel AC and DC electrical circuits including all typical circuit elements and explain the function of each.
- Identify, select, set up and operate basic electronic test and measuring equipment including ammeters, ohmmeters, voltmeters, clamp-on ammeters, multi-meters, power supplies, function generators, RF generators, logic probes, curve tracers and oscilloscopes and explain the application of each.
- Identify, select and properly use tools that are used in the electrical and electronics industry.
- Demonstrate an understanding of commercial 3-phase electric power generation.
- Identify, select and install residential, commercial and industrial electrical devices and equipment.