

Common Course Outline
ELEI 104
BASIC WIRING AND CONSTRUCTION
3 Semester Hours

The Community College of Baltimore County

Description

Basic Wiring and Construction

Develops skills in industrial electricity and industrial electronics; explores topics such as safety, residential, commercial, and industrial wiring systems, bending and installation of conduit, safe rigging techniques, and the purpose and use of The National Electrical Code. There will be 2 lecture hours and 2 lab hours per week.

Pre-requisites: none

Overall Course Objectives.

Upon completion of this course the student will be able to: Demonstrate an understanding of Basic Electrical principles, demonstrate safe work practice's, demonstrate basic skills in wiring, conduit installation, and related construction skills ie, proper use of hand tools, equipment, instruments, etc.

Major Topics

Safety procedures, National Electrical Code, electrical fundamentals voltage, current, resistance. Ohm's Law, Direct and Alternating Current, Basic circuits, construction drawings, schematic diagrams, Testing equipment continuity testers, multimeters, types of wires and cables, wire sizes, ampacity, devices boxes, fixtures, conduit types thin wall, rigid, cutting threading and bending of conduit.

Course Requirements

Note: Students must demonstrate competence in reading (skill level 2), writing (skill level 2), and mathematics (skill level 1) prior to receiving a Certificate as required by the College's Academic Standards policy.

Brad - This information will be submitted in 2 weeks to complete this common course outline.

Other Course Information

For additional information on this course or any related courses in this Certificate Program contact the Industrial Electricity/Electronics Program Director.