

SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Electrical Technology Program Revision Date: August 2025

I. CATALOG DESCRIPTION

Course Number: ELEC 2902

Course Title: Cooperative Experience

Prerequisite(s): None

Catalog Description: On-the-job experience performing electrical installation and troubleshooting, working under industry employers. Application of skills and knowledge acquired in residential, commercial, and/or industrial applications This work experience is paid employment. Contact with supervising instructor two times throughout the CO-OP. Daily performance logs, training site appraisals, instructor assessments, student's cooperative experience and self-summary reports required.

Credit Hours: 2

Class Hours: 0

Lab Hours: 120

Total Contact Hours: 120

II. COURSE OBJECTIVES: *Course will:*

- A. Depending on the type of co-op, the students may perform the following procedures and other procedures as assigned by their employer.*
1. Communicate with customers and respond to customer requirements.
 2. Complete service work order forms and all appropriate paper work associated with a service call.
 3. Gather information on a service request and assist in evaluating complaint information.
 4. Assist in the permit application and inspection processes.
 5. Install residential, commercial, and/or industrial equipment including switches/receptacles, lighting loads, electrical panels/switchgears/starters, etc.
 6. Troubleshoot residential, commercial, and/or industrial equipment with the use of meters and recovery equipment.
 7. Perform load calculations.
 8. Read prints and utilize them in planning and executing plans.
 9. Diagnose electrical problems on varieties of electrical equipment.
 10. Install, monitor, and troubleshoot industrial applications such as electric motors and motion control.
 11. Use a VOM meter, DMM, ammeter, and other technologies.
 12. Summarize internship education experiences.
 13. Discuss experiences, job types, accomplishments, and problems during internship education semester.
 14. Compose and write a thank you letter to his/her internship education employer.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Experience and learn electrical service with an electrical contracting company and/or,
2. Experience and learn electrical installation with an electrical contracting company and/or,

3. Experience and learn electrical troubleshooting from an electrical contracting company and/or,

B. GENERAL EDUCATION LEARNING OUTCOMES

GELO #6: Career and Life Skills

Outcome:

- 1) Employ effective interpersonal and intrapersonal communication skills.

IV. CONTENT/TOPICAL OUTLINE

Depending on the type of co-op, the students may perform the following procedures and other procedures as assigned by their employer.

- A. Safety Procedures
- B. Electrical Service & Installation
- C. Electrical Troubleshooting
- D. Written summary of education experiences during the cooperative experience
- E. Written thank you letter
- F. Student evaluation of education employer
- G. Self-evaluation

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): None
- B. Other Resources: Manufacturer's Manuals and Company Policies & Procedures

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 1. On-the-job training

VII. METHODS OF EVALUATION

- A. Methods of evaluation typically include a combination of the following:
 1. Accumulative job work hours
 2. Weekly work log assessment
 3. Site supervisor/student/instructor individual performance evaluation

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Student must meet all of the following to receive a passing grade:
 1. Submit own work. Students turning in homework, reports, field notes, or calculations by someone other than themselves will receive 0% and be referred to the Division Dean and/or Dean of Students for further disciplinary action. Consequences can include failing the course.
 2. Demonstrate attitude, skills, and character commensurate with industry standards.
 3. All program policies of the Electrical & Electromechanical Technology program and cooperative experience program will be strictly enforced.