

## Common Course Numbering System

Your current Institution is CCCS

### Searching Current Courses For Spring 2015

Course: EIC 122

Title: Electr Distribution Theory II

Long Title: Electrical Distribution Theory II

Course Description: Learns topics pertaining to electrical distribution: installing and operation of protective equipment, transformer hookups, voltage regulators/regulation, hotstick maintenance, troubleshooting, and gloving from platforms and the pole.

Min Credit: 6

Max Credit:

Course Notes: Entered new course 6/6/07 s@  
Changed from ELW to EIC 7/31/07 s@

Origin Notes: TSJC

#### STANDARD COMPETENCIES :

- I. Demonstrate understanding of transformers and transformer connections.
- II. Demonstrate proper operation and importance of voltage regulators.
- III. Demonstrate proper use of over current protection and live line maintenance.
- IV. Demonstrate use of over voltage protection.
- V. Demonstrate troubleshooting ability and maintenance of power lines.

#### TOPICAL OUTLINE :

- I. Transformers
  - A. Design, application, and operation
  - B. Installation
    1. Coils in series and parallel
    2. Proper hanging methods
  - C. Connections
    1. Single phase wye and delta
    2. Three phase wye and delta
  - D. Troubleshooting and fusing
- II. Voltage Regulators

- A. Construction, maintenance, and installation
  - B. Operation
  - C. Purpose
- III. Live Line Maintenance
- A. Hotstick from poles, distribution and transmission
  - B. Rubber gloving from platforms and from the pole
- IV. Lightning Arrestors
- A. Types
  - B. Purpose
  - C. Installation
- V. Troubleshooting Power Lines
- A. Secondary
    - 1. Possible causes
    - 2. Procedures used to detect and repair problem
  - B. Primary
    - 1. Possible causes
    - 2. Procedures used to detect and repair problem
- VI. Phasing and Paralleling of Distribution Lines
- A. Switching line and accompanying problems
  - B. Switching substations
- VII. Line Conversions
- A. Converting a primary line to a higher voltage
  - B. Converting a single phase line to a multi-phase line

RELEASE: 8.5.3

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