ELECTRIC LINEMAN (ELNL)

**ELCL 120** Fundamentals of Electricity 4 Credits
Generation, transmission, and distribution of electricity beginning with the electron and its function of transporting electric power to homes and industry.

**ELCL 125** Job Training and Safety 2 Credits
Covers first aid, CDL, basic use and care of personal protective equipment use and care of climbing equipment, daily inspection and basic use of motorized equipment.

**ELCL 131** Electrical Distribution Theory I 4 Credits
Pole setting techniques, framing methods and specifications, climbing, sagging and splicing of conductors, energizing and de-energizing of lines, and installation of protective grounds.

**ELCL 131L** Electric Distribution Lab 4 Credits
Examination of the National Electric Safety Code, equipment operation, material records, knot tying, installation of protective grounds, pole climbing, replace insulators, replacing crossarms, conductor ties, and overhead line construction.

**ELCL 132** Electrical Distribution Theory II 4 Credits
Installation and operation of protective equipment, transformer hookups, voltage regulation, hotstick maintenance, troubleshooting, and gloving from the pole. Four hours lecture, three hours laboratory per week.
**Prerequisites:** ELCL 131.
**Corequisites:** ELCL 132L.

**ELCL 132L** Electrical Distribution Theory II Laboratory 2 Credits
Lab component required for ELCL 132.
**Prerequisites:** ELCL 131.
**Corequisites:** ELCL 132.

**ELCL 137** Advanced Electrical Distribution 2 Credits
Meter safety, connector installation, street lighting, rubber cover up, and public relations. Two hours lecture, eight hours laboratory per week.
**Corequisites:** ELCL 137L.

**ELCL 137L** Advanced Electrical Distribution Laboratory 4 Credits
Lab component required for ELCL 137.
**Corequisites:** ELCL 137.

**ELCL 140** Underground Procedures 4 Credits
Safety practices, terminology, fault finding, cable locating, switching procedure, installation of terminal devices, splicing, and transformer application. Five hours lecture, four hours laboratory per week.
**Corequisites:** ELCL 140L.

**ELCL 140L** Underground Procedures Laboratory 2 Credits
Lab component required for ELCL 140.
**Corequisites:** ELCL 140.

**ELCL 145** Hot Line Procedures 1 Credit
Two weeks of training by outside specialists covering current hotline maintenance and underground installation methods. Eight hours lecture, twenty-four hours laboratory per week.
**Corequisites:** ELCL 145L.

**ELCL 145L** Hot Line Procedures Laboratory 2 Credits
Lab component required for ELCL 145.
**Corequisites:** ELCL 145.

**ELCL 195** Independent Study 1 or 2 Credits
Course may be taken multiple times up to maximum of 6 credit hours.

**ELCL 196 Topics** 1 or 2 Credits
Course may be taken multiple times up to maximum of 15 credit hours.

**ELCL 199 Internship** 6 Credits
Opportunity for an individual to be employed for training by a utility company while maintaining his/her status as a Colorado Mesa University student. Provides excellent on-the-job training benefits. Students usually selected for this course by formal interview.
**Prerequisites:** Permission of instructor. Eighteen hours per week, two semesters after completion of regular program.
Course may be taken multiple times up to maximum of 6 credit hours.

**ELCL 199 Topics** 1 or 2 Credits
Course may be taken multiple times up to maximum of 15 credit hours.