



**2017-2018 PROGRAM REQUIREMENTS**  
**Degree: Technical Certificate**  
**Program of Study: Electric Lineworker**

**About This Major . . .**

This program covers all areas of training required to work with electric lines, including: basic skills in studies of electricity, math, fundamentals of line work, transformer connections, and underground installation. In addition to training at the field location, all students are encouraged to obtain a Red Cross First Aid and a CPR card as a requirement for employment. With this certificate, students will be prepared for entry-level positions as electric line mechanics, electric line workers, or power line workers.

For more information on what you can do with this major, go to <http://www.coloradomesa.edu/wccc/programs.html>.

All CMU certificate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Apply principles of grammar and vocabulary in the documentation required to perform the duties of a Ground man or an Apprentice Lineman for the electrical industry. (Communication Fluency)
2. Apply mathematical concepts to perform electrical formula calculations used for finding voltages, amperes, resistance, and power. (Quantitative Fluency)
3. Evaluate the situation, and determine which Standard Operating Procedure (SOP) to apply material to perform the job in a safe and timely manner. (Applied Learning)
4. Describe the scope and application of principle features of an electric line worker, including core practices required by electrical industry. (Critical Thinking)
5. Demonstrate familiarity with Standard Operating Procedures regarding climbing structures, replacing associated equipment, pole setting procedures, and soil recognition for underground applications. Perform all required safety procedures. (Specialized Knowledge)
6. Evaluate company policies, and perform in a manner that is consistent to Federal and State laws. (Specialized Knowledge)
7. Perform as a member of a crew in an ethical manner consistent with public, and company policy. (Applied Learning)

**Advising Process and DegreeWorks**

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

**Graduation Process**

Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

If a student's petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.

## **INSTITUTIONAL CERTIFICATE REQUIREMENTS**

The following institutional requirements apply to all CMU technical certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 100-200 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A grade lower than "C" will not be counted toward meeting the requirements.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed twenty-five percent of the semester credit hours required for a technical certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

## **PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS**

- 38 semester hours for the Technical Certificate in Electric Lineworker.
- 2.00 cumulative GPA or higher in all CMU coursework.

## **TECHNICAL CERTIFICATE: ELECTRIC LINEWORKER REQUIREMENTS** (38 semester hours)

- MATH 107 - Career Mathematics (3)
- ELCL 120 - Fundamentals of Electricity (4)
- ELCL 125 - Job Training and Safety (2)
- ELCL 131 - Electrical Distribution Theory I (4)
- ELCL 131L - Electrical Distribution Theory I Laboratory (4)
- ELCL 132 - Electrical Distribution Theory II (4)
- ELCL 132L - Electrical Distribution Theory II Laboratory (2)
- ELCL 137 - Advanced Electrical Distribution (2)
- ELCL 137L - Advanced Electrical Distribution Laboratory (4)
- ELCL 140 - Underground Procedure (4)
- ELCL 140L - Underground Procedure Laboratory (2)
- ELCL 145 - Hotline Procedures (1)
- ELCL 145L - Hotline Procedures Laboratory (2)

### **Special Requirements and Recommendations:**

Students will be encouraged to have current First Aid and CPR certification before they successfully complete the requirements of this program. This may be achieved by any of the following: (1) holding current cards; (2) obtaining American Red Cross "Standard" or "Advanced" rating and American Heart Association or equivalent certification, or (3) successfully completing KINE 265 offered by Colorado Mesa University.

Additional expenses - Students will be required to purchase or have approximately \$1000.00 in tools and personal equipment. This does not include required textbooks or an adequate pair of work boots. These costs may vary with student needs and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields.

## SUGGESTED COURSE SEQUENCING

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### **Freshman Year, Fall Semester: 17 credits**

- MATH 107 - Career Mathematics (3)
- ELCL 120 - Fundamentals of Electricity (4)
- ELCL 125 - Job Training and Safety (2)
- ELCL 131 - Electrical Distribution Theory I (4)
- ELCL 131L - Electric Distribution Laboratory (4)
- \*Standard First Aid/CPR

### **Freshman Year, Spring Semester: 21 credits**

- ELCL 132 - Electrical Distribution Theory II (4)
  - ELCL 132L - Electrical Distribution Theory II Laboratory (2)
  - ELCL 137 - Advanced Electrical Distribution (2)
  - ELCL 137L - Advanced Electrical Distribution Laboratory (4)
  - ELCL 140 - Underground Procedures (4)
  - ELCL 140L - Underground Procedures Laboratory (2)
  - ELCL 145 - Hotline Procedures (1)
  - ELCL 145L - Hotline Procedures Laboratory (2)
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