

ELECTRIC LINEWORKER (TECHNICAL CERTIFICATE)

Award: Technical Certificate
Program of Study: Electric Lineworker
Program Code: 1381

About This Program . . .

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, visit WCCC's Programs of Study (<https://www.coloradomesa.edu/wccc/programs/>) page.

All CMU/WCCC technical certificate graduates are expected to demonstrate proficiency in communication fluency, quantitative fluency, specialized knowledge/applied learning, and critical thinking. 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)

Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select 'Print Options.' This will give you the options to either 'Send Page to Printer' or 'Download PDF of This Page.' The 'Download PDF of This Page' option

prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

Institutional Certificate Requirements

The following institutional requirements apply to all CMU or WCCC Technical Certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Consists of 100-200 level courses.
- At least fifty percent of the credit hours must be taken at CMU/WCCC.
- 2.00 cumulative GPA or higher in all CMU/WCCC 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, must maintain a 2.00 cumulative GPA or higher.)

- 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.

Code	Title	Semester Credit Hours
MATH 107	Career Math	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 Lab	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 Procedures	4
ELCL 140L	Underground Procedures Laboratory	2
ELCL 145	Hot Line Procedures	1
ELCL 145L	Hot Line Procedures Laboratory	2
Total Semester Credit Hours		38

- 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.

Suggested Course Plan

First Year

Fall Semester		Semester Credit Hours
MATH 107	Career Math	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 Lab	4
Standard First Aid/CPR		
Semester Credit Hours		17

Spring Semester

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	Hot Line Procedures	1
ELCL 145L	Hot Line Procedures Laboratory	2
Semester Credit Hours		21
Total Semester Credit Hours		38

Advising and Graduation

Advising Process and DegreeWorks

Documentation on the pages related to this program 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):