



2018-2019 PROGRAM REQUIREMENTS

Degree: Associate of Applied Science

Major: Construction Electrical

About This Major . . .

The A.A.S. degree in Construction Electrical is designed to prepare students for a wide range of opportunities in the Construction electrical field. The curriculum incorporates courses in building materials, estimating, planning and scheduling, installations, codes, safety, tools, calculations, and print reading. Essential Learning courses that develop supervisory skills. Career options include obtaining a position as an apprentice electrician, journeyman electrician, electrical installer, or maintenance and repair electrician.

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

All CMU associate 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 construction electrician. (communication fluency)
2. Apply Mathematical concepts and practices that are required to properly calculate electrical formulas, and linear measurements. (quantitative fluency)
3. Evaluate evidence discovered during the diagnosis/troubleshooting of electrical systems and apply those findings to strategies to properly repair these systems. (critical thinking)
4. Describe the scope and application of principle features of the field of study, including core practices of a construction electrician. (applied learning)
5. Demonstrate personal and professional ethical behavior as applied to a construction electrician. (specialized knowledge)
6. Demonstrate mastery of the current terminology in the construction electrician industry. (specialized knowledge)

Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. The suggested course sequencing outlines how students could finish degree requirements. 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 altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

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 degree 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 degree requirements:

- 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 DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU/WCCC Associate of Applied Science (AAS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours minimum.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU/WCCC.
- 2.00 cumulative GPA or higher in all CMU/WCCC coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 20 semester credit hours for an AAS degree.
- 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 Degree Requirements.
- The Catalog Year determines which program sheet and degree 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 DEGREE REQUIREMENTS

- 63 semester hours total for the AAS, Construction Electrical.
- A minimum of 16 credits taken at CMU in no fewer than two semesters.
- A "C" or better must be achieved in coursework toward major content area.

ESSENTIAL LEARNING REQUIREMENTS (15 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Communication (6 semester hours)

- ☐ ENGL 111 - English Composition (3)
- ☐ SPCH 101 - Interpersonal Communication (3)

Mathematics (3 semester hours)

- ☐ MATH 107 - Career Math (3) or higher

Other Essential Learning Core Courses (6 semester hours)

- ☐ Select one Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course (3)
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OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)

- ☐ KINE 100 - Health and Wellness (1)
- ☐ Select one Activity course (1)

AAS: CONSTRUCTION ELECTRICAL (46 semester hours, must earn a grade of “C” or better in each course.)

- ☐ ELCE 102 - Electrical Blueprint Reading (4)
- ☐ ELCE 110 - House Wiring (4)
- ☐ ELCE 120 - Commercial Wiring (4)
- ☐ ELCE 124 - Electrical Safety (1)
- ☐ ELCE 130 - National Electrical Code I (4)
- ☐ ELCE 135 - National Electrical Code II (4)
- ☐ ELCE 144 - Grounding and Bonding (1)
- ☐ ELCE 150 - DC Circuit Fundamentals (4)
- ☐ ELCE 155 - AC Circuit Fundamentals (4)
- ☐ ELCE 167 - Electrical Maintenance (4)
- ☐ ELCE 220 - Industrial Controls (4)
- ☐ ELCE 225 - Introduction to PLCs (4)
- ☐ ELCE 229 - AC and DC Variable Speed Drive (2)
- ☐ ELCE 263 - Specific Wiring (2)

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits

- MATH 107 - Career Mathematics (3)
- ELCE 102 - Electrical Blueprint Reading (4)
- ELCE 110 - House Wiring (4)
- ELCE 150 - DC Circuit Fundamentals (4)

Freshman Year, Spring Semester: 14 credits

- ELCE 120 - Commercial Wiring (4)
- ELCE 124 - Electrical Safety (1)
- ELCE 130 - National Electrical Code I (4)
- ELCE 155 - AC Circuit Fundamentals (4)
- KINE 100 - Health and Wellness (1)

Sophomore Year, Fall Semester: 16 credits

- ELCE 220 - Industrial Controls (4)
- ELCE 225 - Introduction to PLCs (4)
- ELCE 144 - Grounding and Bonding (1)
- ENGL 111 - English Composition (3)
- Essential Learning Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course (3)
- KINA 1XX Activity Course (1)

Sophomore Year, Spring Semester: 18 credits

- ELCE 229 - AC and DC Variable Speed Drive (2)
 - ELCE 263 - Specific Wiring (2)
 - ELCE 135 - National Electrical Code II (4)
 - ELCE 167 - Electrical Maintenance (4)
 - SPCH 101 - Interpersonal Communications (3)
 - Essential Learning Social and Behavioral Sciences, History, Natural Sciences, Fine Arts or Humanities course (3)
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