

Program Information

The Anoka Technical College Construction Electrician diploma is an 82-credit program designed to develop skills in the installation and testing of electrical fixtures. Students will study wiring, including blueprint reading, wiring code, electrical theory and wiring laboratory. Many graduates of this program join unions to complete their apprenticeship training.

Program Learning Outcomes

By completing this program, students will achieve the following learning outcomes, which, all outcomes are determined at a first year apprentice level:

- Work safely amongst others.
- Troubleshoot electrical circuits using proper technique.
- Design and install single family dwelling circuits to NEC standards.
- Design and install commercial and industry circuits to NEC standards.
- Design and install control circuits to NEC standards.
- Effectively follow verbal and written instructions.
- Identify code articles that pertain to the project.

Accreditation/Certification

Minnesota Department of Labor and Industry
 Two year Construction Electrician Program Approval

Endorsements

The Construction Electrician diploma is approved by:

- State Board of Electricity
- Twin Cities Joint Apprenticeship Committee,
- Many unions in the upper Midwest including:
 - Local 110 (St. Paul)
 - Local 292 (Minneapolis)
 - Local 343 (Mankato)
 - Local 242 (Duluth)
 - Local 294 (Bemidji and Iron Range)
 - Local 1426 (Fargo, East Grand Forks and Grand Forks)
 - Local 426 (Sioux City, Sioux Falls, Colorado and Kansas)

Course Prerequisites

Although no prior knowledge or experience is necessary to succeed in this program, prospective Construction Electrician students should have a high school diploma or GED. Helpful high school courses include electronics, drafting, carpentry, and algebra/trigonometry. Physical exertion is often required and electrical construction may be performed outdoors or under such conditions as heights, unfinished construction or high voltages.

Some courses may require appropriate test score or completion of basic math, basic English and/or reading courses with a “C” or better.

ENGL 1107 Composition I Prerequisite ENGL 0102 or ENGL 0960 and READ 0900 or READ 0960 or appropriate test score.

MATH 1400 Algebra and Trigonometry Prerequisite MATH 0801 or appropriate test score.

Graduation Requirements

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

Transfer Opportunities

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:

- [Minnesota Transfer](#)
- [Anoka Technical College transfer student](#)

Industry Information

As a construction electrician, program graduates will work with electrical materials on construction and remodeling jobs. More specifically, construction electricians plan, assemble, install and test electrical fixtures, apparatus and wiring that is used in both new and existing buildings. Construction electricians must have complete knowledge of electrical codes, theory and materials in order to correctly install and troubleshoot all types of electrical equipment and controls as required for each type of building.

Wages/Outlook/Advancement

Wage information is available from the [Minnesota Department of Employment and Economic Development](#)

Experienced electricians who work for large companies have several options for advancement. Those who have good people skills may become supervisors. Those who have good organizational skills may become managers. Construction electricians may transfer to electrical jobs in the shipbuilding, automobile or aircraft industries. Some electricians start their own businesses. Those who have a master electrician’s license may become contractors.

Start Dates

Fall Semester.....August
 Spring SemesterJanuary**

**Students who start in the spring will need more time to complete this program.

Program Sequence

Fall Semester	19
<input type="checkbox"/> ELEC 1002 Electrical Theory I	6
<input type="checkbox"/> ELEC 1021 Residential Wiring Lab I.....	5
<input type="checkbox"/> ELEC 1031 National Electrical Code I	3
<input type="checkbox"/> MATH 1400 Algebra and Trigonometry.....	5
Spring Semester	18
<input type="checkbox"/> ELEC 1062 Electrical Theory II.....	6
<input type="checkbox"/> ELEC 1081 Residential Wiring Lab II	6
<input type="checkbox"/> ELEC 1091 National Electrical Code II	3
<input type="checkbox"/> ELEC 1122 Electrical Heating & Air Conditioning	3
Summer Semester	8
<input type="checkbox"/> ELEC 1101 Power Limited	2
<input type="checkbox"/> ELEC 1110 Lighting.....	2
<input type="checkbox"/> ELEC 1130 Plan Reading.....	2
<input type="checkbox"/> ELEC 1142 Safety Principles/OSHA	2



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Construction Electrician

Diploma

Fall Semester	19
<input type="checkbox"/> ELEC 2011 Commercial Wiring Lab I.....	5
<input type="checkbox"/> ELEC 2021 Motors and Controls I.....	2
<input type="checkbox"/> ELEC 2031 National Electrical Code III.....	3
<input type="checkbox"/> ELEC 2041 Three-Phase Electrical Theory.....	5
<input type="checkbox"/> ENGL 1107 Composition I	4
Spring Semester	18
<input type="checkbox"/> ELEC 1108 PLC's for Electricians.....	3
<input type="checkbox"/> ELEC 2061 Commercial Wiring Lab II.....	6
<input type="checkbox"/> ELEC 2072 Motors and Controls II.....	3
<input type="checkbox"/> ELEC 2081 National Electrical Code IV.....	3
<input type="checkbox"/> SPCH 1200 Interpersonal Communication	3

Faculty Contact

[Brian Schelkoph](#)..... 763-576-4228

For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or EnrollmentServices@anokatech.edu