

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:

1. Work safely amongst others.
2. Troubleshoot electrical circuits using proper technique.
3. Design and install single family dwelling circuits to NEC standards.
4. Design and install commercial and industry circuits to NEC standards.
5. Design and install control circuits to NEC standards.
6. Effectively follow verbal and written instructions.
7. 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.

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](http://www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search): (www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search)
- [Anoka Technical College transfer student](http://www.anokatech.edu/BecomeStudent/Transfers.aspx): (www.anokatech.edu/BecomeStudent/Transfers.aspx)

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](https://mn.gov/deed/job-seekers/job-outlook/) (https://mn.gov/deed/job-seekers/job-outlook/).

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.

Gainful Employment

Follow this link for a [Gainful Employment Report](#).

Technical Education: 70 Credits

<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"/>	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	4
<input type="checkbox"/>	ELEC 1101	Power Limited	2
<input type="checkbox"/>	ELEC 1108	PLC’s for Electricians.....	3
<input type="checkbox"/>	ELEC 1110	Lighting.....	2
<input type="checkbox"/>	ELEC 1122	Electrical Heating & Air Conditioning	3
<input type="checkbox"/>	ELEC 1130	Plan Reading.....	2



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(continued)

2019-2020

Construction Electrician

Diploma

- ELEC 1142 Safety Principles/OSHA 2
- ELEC 2011 Commercial Wiring Lab I 5
- ELEC 2021 Motors and Controls I 2
- ELEC 2031 National Electrical Code III 3
- ELEC 2041 Three-Phase Electrical Theory 5
- ELEC 2061 Commercial Wiring Lab II 5
- ELEC 2072 Motors and Controls II 3
- ELEC 2081 National Electrical Code IV 3

General Education/MnTC Requirements: 12 Credits

Twelve (12) general education credits of Minnesota Transfer Curriculum (MnTC) are required. Student is required to take:

- ENGL 1107 Composition I 4
- MATH 1400 Algebra and Trigonometry 5
- SPCH 1200 Interpersonal Communication 3

Also see: Architectural Technology AAS, Architectural Technology diploma, Architectural 2D CAD, and Construction Estimating certificate

Start Dates

Fall Semester August
 Spring Semester January**

***Students who start in the spring will need more time to complete this program. Limited first semester technical courses are offered in the Spring semester.*

Faculty Contact

[Brian Schelkoph](#) 763-576-4228
[Tim Simpson](#) 763-576-4142

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

Sample Program Sequence

Full Time

	Fall Semester	Spring Semester	Summer Semester (4 weeks)
1st YEAR	ELEC 1002..... 6	ELEC 1062..... 6	ELEC 1101..... 2
	ELEC 1021..... 5	ELEC 1081..... 6	ELEC 1110..... 2
	ELEC 1031..... 3	ELEC 1091..... 4	ELEC 1130..... 2
	MATH 1400 ... 5	ELEC 1122..... 3	ELEC 1142..... 2
	TOTAL..... 19	TOTAL..... 19	TOTAL..... 8
2nd YEAR	Fall Semester	Spring Semester	
	ELEC 2011..... 5	ELEC 1108..... 3	
	ELEC 2021..... 2	ELEC 2061 5	
	ELEC 2031..... 3	ELEC 2072..... 3	
	ELEC 2041..... 5	ELEC 2081..... 3	
	SPCH 1200..... 3	ENGL 1107 4	
	TOTAL..... 18	TOTAL..... 18	



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