



## Commercial and Residential Wiring AAS - 82 credits

Program Area: Electrician (Fall 2017)

**\*\*\*REMEMBER TO REGISTER EARLY\*\*\***

### Program Description

The Commercial and Residential Wiring A.A.S. Degree program combines technical courses with general education courses, offering graduates an excellent foundation for employment leading to leadership roles, management positions, and potential transfer to institutions with baccalaureate degrees. This program is designed to develop entry-level skills; and to complete the program within two years, the student is advised to follow the program guide.

### Program Outcomes

The program is designed to provide students with the knowledge and ability to:

- Have a working knowledge and understanding of the National Electrical Code (NEC)
- Have a working knowledge of safety issues relating to the electrical industry and workplace
- Understand and be able to perform tasks relating to residential wiring
- Understand and be able to perform tasks relating to commercial wiring
- Understand and be able to perform tasks relating to industrial wiring

### Program Articulations

This program has an articulation agreement in place that allows students to transfer credits earned in the LSC Commercial and Residential Wiring AAS degree: Minnesota State University Moorhead, BS in Operations Management:

<http://www.mntransfer.org/download.php?id=4885>

### Required Courses

Number	Name	Credits	Term
ELTN 1406	DC Electricity	4	
ELTN 1408	AC Electricity	4	
ELTN 1412	Digital Electronics	2	
MATH 1115	Contemporary Math	4	
ELTN 1422	Media and Cabling	2	
ELTN 1442*	Motors and Generators	6	
ELTN 1470	Systematic Troubleshooting	1	
ELTN 1500	Practical PC Maintenance	2	
ELTN 1635*	PLT Control Lab	3	
ELTN 2442	Automation Controllers	3	
ELEC 2401*	Residential Wiring	1	
ELEC 2402*	Residential Wiring Lab	3	
ELEC 2405*	Electrical Blueprint Reading	2	
ELEC 2421*	Commercial Wiring I	1	
ELEC 2422*	Commercial Wiring I Lab	3	
ELEC 2431*	Motor Control	2	
ELEC 2432*	Motor Control Lab	1	
ELEC 2440*	National Electrical Code I	2	
ELTN 2430*	Introduction to Instrumentation	3	
ELEC 2451*	Commercial Wiring II	1	
ELEC 2452*	Commercial Wiring II Lab	3	
ELEC 2461*	Electrical Troubleshooting	2	
ELEC 2471*	Industrial Wiring	2	
ELEC 2472*	Industrial Wiring Lab	2	
ELEC 2501*	Electric Controls	2	
ELEC 2502*	Electrics Controls Lab	1	
ELEC 2510*	National Electrical Code II	2	
ELTN 2440*	Motor Speed Controllers	3	
Choose 4 credits (Other courses may be allowed as electives with program advisor approval)	<ul style="list-style-type: none"> <li>• Any <b>ELTN</b> or <b>ELEC</b> courses not listed above</li> <li>• ALTH 1435: American Red Cross Community First Aid and CPR (1 cr)</li> <li>• COMM 1601: Interviewing Procedure and Practice (1 cr)</li> <li>• COMM 1602: Teambuilding Procedure and Practice (1 cr)</li> </ul>	4	
General Education Electives	Choose from at least 2 different Goal Areas: 1-3 or 5-10 of the Minnesota Transfer Curriculum	11	

**Total Credits** **82**

\*Requires a prerequisite or a concurrent course



## Commercial and Residential Wiring AAS - 82 credits

Program Area: Electrician (Fall 2017)

**\*\*\*REMEMBER TO REGISTER EARLY\*\*\***

---

### Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English/reading and mathematics.

#### English/Reading:

- A score of 78 or higher on the reading comprehension portion of the Accuplacer, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0955 may be taken concurrently with Semester I coursework.

#### Mathematics:

- A score of 71 or higher on the **Elementary Algebra Skills** portion of the Accuplacer, or
- Completion of MATH 0460 (or equivalent course or higher). MATH 0460 can be taken concurrently with Semester I coursework.
- With instructor permission, concurrent enrollment in MATH 1115.

For interpretation of test results and selection of appropriate coursework;  
or general information about the program, admissions, financial aid, and getting started at LSC,  
contact the professional advising team at: [pat@lsc.edu](mailto:pat@lsc.edu) or 218-733-7601

---

For more information about the Commercial and Residential Wiring AAS Degree including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see program website: <https://degrees.lsc.edu/electrician/>

- or -

Contact Faculty Advisor



MINNESOTA STATE

CIP Code: 46.0302  
MnSCU Program ID: 8467  
LSC Major ID: 5055

Created: 3/1/05  
AASC Approval: 2/15/17  
Updated: 3/1/17

All courses in diploma and/or certificate programs are acceptable for credit toward Lake Superior College degree programs as indicated on individual program planners. This is not a contract; Lake Superior College reserves the right to change the planner as necessary. This document is available in alternative formats upon request, by contacting Disability Services, [disabilityservices@lsc.edu](mailto:disabilityservices@lsc.edu) or (218) 733-7650 or MRS/TTY (800) 627-3529.