

# Commercial and Residential Wiring AAS - 82 credits

Program Area: Electrician (Fall 2021)

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

THE ELECTRONIC PROGRAM APPLICATION MAY BE FOUND ON THE LSC WEBSITE. APPLICATION DATES TO APPLY ARE JANUARY 31ST - FEBRUARY 28TH ANNUALLY.

## **Program Description**

The Commercial and Residential Wiring AAS 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.

Approved by the Minnesota Department of Labor and Industry for one-year credit toward the Journeyman exam.

## **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

Qualified applicants should be aware that program class sizes are limited, which may delay acceptance into the program.

\*Indicates courses required to be completed or currently in-progress at time of application in order to be considered for acceptance. **Pre-Program 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	

**Required Courses** 

Number	Name	Credits	Term
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	Intro 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> <li>Any ELTN or ELEC 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> </ul>	4	
General Education Electives	Choose from at least 2 different Goal Areas: 1-3 or 5-10 of the Minnesota Transfer Curriculum	11	



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# **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

# **Pre-program Requirements**

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

### English/Reading:

- Eligible for ENGL 1106 College Composition I, or
- Completion of ENGL/READ 0950/0955 (or equivalent or higher). ENGL/READ 0950/0955 may be taken concurrently with Semester I coursework.

### **Mathematics:**

- Eligible for MATH 0970 Intermediate Algebra, or
- Completion of MATH 0950/0955 (or equivalent or higher). MATH 0950/0955 may be taken concurrently with Semester I coursework.
- With instructor permission, concurrent enrollment in MATH 1115

There are other ways to qualify. Visit Course Placement (Isc.edu/course-placement) to find out more.

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* (advising@lsc.edu) at 218-733-7601

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

or

Contact Faculty Advisor, Jerry Erickson (jerry.erickson@lsc.edu) or 218-733-6948



CIP Code: 46.0302

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LSC Major ID: 5055

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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 <u>Disability Services</u> at (218) 733-7650 or MRS/TTY (800) 627-3529.