

Commercial and Residential Wiring AAS - 82 credits

Program Area: Electrician (Fall 2020)

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

Required Courses

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	3	
	Instrumentation		
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)	 Any ELTN or ELEC courses not listed above ALTH 1435: American Red Cross Community First Aid and CPR (1 cr) COMM 1601: Interviewing Procedure and Practice (1 cr) COMM 1602: Teambuilding Procedure and Practice (1 cr) 	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



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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 250 or higher on the reading 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 270 or higher on the Arithmetic portion of the Accuplacer, or
- A score of 236 or higher on the QAS portion and a score of 236 or higher on the Arithmetic 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* (pat@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

Minnesota State Program ID: 8467

LSC Major ID: 5055

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