



## Basic Electronics Certificate - 26 credits

Program Area: Electronics (Fall 2024)

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

### Program Description

This certificate is designed to give basic knowledge of electronics and computers. The technical knowledge received will prepare students for future training on specific electronic equipment

This certificate transfers seamlessly into the Electronic Technology Diploma (60 credits), and the Electronic Engineering Technology AAS (72 credits)

### 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 1432*	Solid-State Devices	5	
ELTN 1500	Practical PC Maintenance	2	
ELTN 2442*	Automation Controllers	3	

**Total Credits** **26**

\*Requires a prerequisite or a concurrent course

### Program Outcomes

- Operate common electronic test equipment, oscilloscopes, DMM's, and signal generators
- Read and understand circuit schematics, i.e. recognize basic circuit configurations and understand their operation
- Understand basic circuit analysis techniques
- Troubleshoot and repair common electronic circuits

### Pre-program Requirements

Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below:

#### English/Reading:

- Eligible for ENGL/READ 0955 – Read/Write College Prep: Advanced, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0950 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. or
- With instructor permission, concurrent enrollment in MATH 1115.

There are other ways to qualify. Visit [Course Placement](http://lsc.edu/course-placement) (lsc.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](mailto:advising@lsc.edu) (advising@lsc.edu) at 218-733-7601



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For more information about the Basic Electronics Certificate including course descriptions, course prerequisites, the program report, and potential career opportunities, see the [program website](https://degrees.lsc.edu/basic-electronics/) (<https://degrees.lsc.edu/basic-electronics/>)

**or**

Contact Faculty Advisors, [Dave Lustila](mailto:david.lustila@lsc.edu) (david.lustila@lsc.edu) at 218-733-7687 or [Alan Alberg](mailto:alan.alberg@lsc.edu) (alan.alberg@lsc.edu) at 218-733-7687



MINNESOTA STATE

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LSC Major ID: 5677

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