

3800.4040 TWO-YEAR ELECTRICAL PROGRAM CONTENT.

Subpart 1. **Contact time.** A two-year electrical program shall consist of 2,000 or more hours of student and instructor contact time and is subject to the following:

A. up to 200 hours of independent study may be substituted for student and instructor contact time;

B. a minimum of 1,600 hours of student and instructor contact time must be technical electrical instruction;

C. at least 30 percent but not more than 40 percent of the technical electrical student and instructor contact time must be lecture hours, and the remainder shop or lab hours;

D. intern programs, whether internal or external, do not satisfy the contact time requirement under this subpart; and

E. a student may receive advanced standing credit for up to one-third of the courses of an approved program.

Subp. 2. **Attendance policy.** A two-year electrical program must include an attendance policy that requires students to attend a minimum of 95 percent of each required program course. The program must include a provision for students to retake courses or make up portions of courses when the student does not attend 95 percent or more of each required program course. Attendance records must be kept at the course level.

Subp. 3. **Technical content.** A two-year electrical program must include courses that cover the following knowledge and skill areas:

- A. electrical theory;
- B. electronic theory;
- C. lighting systems;
- D. heating and cooling systems;
- E. motors;
- F. generators;
- G. transformers;
- H. panelboards and switchboards;
- I. overcurrent devices;
- J. grounding;
- K. motor controls;
- L. electronic controls;

- M. electrical code;
- N. electrical test equipment and troubleshooting;
- O. specification and blueprint reading;
- P. installation and application of electrical materials and equipment;
- Q. wiring methods;
- R. conductors and cables;
- S. tools, materials, and handling;
- T. fire alarm systems;
- U. communication systems;
- V. alarm systems;
- W. data systems;
- X. electrical and job site safety;
- Y. related mathematics; and
- Z. related general education.

Statutory Authority: *MS s 326B.32*

History: *50 SR 971*

Published Electronically: *April 16, 2026*