3801.3860 TWO-YEAR ELECTRICAL PROGRAM CONTENT.

- Subpart 1. **Contact hours.** A two-year electrical program shall consist of 2,000 or more hours of student/instructor contact time and is subject to the following:
- A. up to 200 hours of independent study may be substituted for student/instructor contact time;
- B. a minimum of 1,600 hours of contact time must be technical electrical instruction;
- C. at least 30 percent but not more than 40 percent of the technical electrical contact hours must be lecture and the balance shop or lab hours;
- D. intern programs, whether internal or external, must not be used to comply with the contact hours requirement;
- 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 jobsite safety;
- Y. related mathematics; and
- Z. related general education.

Statutory Authority: MS s 326.241; 326.242; 326B.33

History: 26 SR 1017; L 2007 c 140 art 5 s 32; art 13 s 4

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