

**Course discipline/number/title: FST 1661: Electrical Safety National Electric Code****A. CATALOG DESCRIPTION**

1. **Credits:** 1
2. **Hours/Week:** 1
3. **Prerequisites (Course discipline/number):** MATH 1015 or MATH 1016 or MATH 1115
4. **Other requirements:** None
5. **MnTC Goals (if any):** NA

**B. COURSE DESCRIPTION:** This course covers the Minnesota licensing requirements and presents the National Electric Code. Topics included from Code are branch circuits, feeders, general requirements, over current protection, grounding, conductors, and electrical safety.**C. DATE LAST REVISED (Month, year):** March, 2025**D. OUTLINE OF MAJOR CONTENT AREAS:**

1. One and Multifamily Dwellings
2. Commercial and Industrial Locations

**E. LEARNING OUTCOMES (GENERAL):** The student will be able to:

1. Explain code article one hundred
2. Calculate fuse size
3. Calculate breaker size
4. Calculate voltage drop
5. Explain delta connection
6. Explain wye connection
7. Describe hazardous location

**F. LEARNING OUTCOMES (MNTC):** NA**G. METHODS FOR EVALUATION OF STUDENT LEARNING:** Methods may include but are not limited to:

1. Tests
2. Activities

**H. RCTC CORE OUTCOME(S).** This course contributes to meeting the following RCTC Core Outcome(s):  
**Critical Thinking.** Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.**I. SPECIAL INFORMATION (if any):**

1. Attendance is crucial in this class.