**DCTC HCEM 1110 WELDING AND FLAME CUTTING**

1. **Course Description**
   * **Credits:** 2.00
   * **Lecture Hours/Week:** 0.00
   * **Lab Hours/Week:** 2.00
   * **OJT Hours/Week:** 0
   * **Prerequisites:** None
   * **Corequisites:** None
   * **MnTC Goals:** None

Students study basic arc and gas welding used in the heavy equipment industry. Theory, safety, and practice will be taught. Cutting and heat bending are also included. Prerequisites: HCEM1101 or instructor's approval

1. **Course Effective Dates:**3/22/98 – Present
2. **Outline of Major Content Areas**

As noted on course syllabus

1. **Learning Outcomes**
   * apply failure analysis of weld defects
   * complete welding safety examiniation
   * demonstrate adjustment of regulators
   * demonstrate cutting techniques
   * demonstrate welding equipment set up
   * display shop safety procedures
   * exhibit shop safety procedures
   * identify cylinder types
   * identify oxygen and acetylene regulators
   * identify weld defects
   * identify weld joint types
   * identify welding compressed gas types
   * identify welding electrodes
   * operating heating torch
   * perform various 6011 and 7018 welding joints
2. **Minnesota Transfer Curriculum Goal Area(s) and Competencies**
3. **Learner Outcomes Assessment**

As noted on course syllabus

1. **Special Information**

None noted