**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