

# MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

## Course Outline

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<b>Course Title:</b>	<b>Advance Maintenance Welding &amp; Cutting</b>	<b>Submitted By:</b>	<b>Waldorf, Parker, Hill</b>
<b>Semester Course Prefix and Number:</b>	<b>IMT 2251</b>	<b>Approval Date:</b>	
<b>Old Quarter Course Prefix and Number:</b>		<b>Revision Date:</b>	<b>11-30-11</b>
<b>Number of Credits:</b>	<b>3</b>	<b>Number of Lecture Credits:</b>	<b>1</b>
<b>Semester(s) Offered:</b>		<b>Number of Lab Credits:</b>	<b>2</b>
<b>Class Size:</b>	<b>35</b>	<b>Number of Lab Hours:</b>	
<b>Class Size:</b>	<b>35</b>	<b>Number of Studio/Demonstration/Internship Credits:</b>	
<b>Negotiated by AASC on:</b>			
<b>(date)</b>			

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### Course Purpose Code:

- 0 – Developmental Courses
- 1 – Non-transferable, General Education
- 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of general education (MNTC) (e.g. computer science, health, physical education)
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
- 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

### Catalog Description:

This course applies advanced skills in oxyfuel burning, welding, and arc welding as used by maintenance person.

### Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): IMT 1251, IMT 1252

Reading Prerequisite:

Composition Prerequisite:

Mathematics Prerequisite:

### Career Programs and Transfer Majors Accessing this Course:

### Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:

(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer's approval are required.)

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|--|--|
| 0. <input checked="" type="checkbox"/> None                                | 6. <input type="checkbox"/> The Humanities and Fine Arts     |
| 1. <input type="checkbox"/> Communications                                 | 7. <input type="checkbox"/> Human Diversity                  |
| 2. <input type="checkbox"/> Critical Thinking                              | 8. <input type="checkbox"/> Global Perspectives              |
| 3. <input type="checkbox"/> Natural Sciences                               | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning                 | 10. <input type="checkbox"/> People and the Environment      |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences |  |

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

- Operate a cutting torch
- Weld in horizontal position - varied thickness and joints
- Weld in vertical position - varied thickness and joints
- Weld overhead - varied thickness and joints
- Fabricate and weld pressure vessel in fixed position

**Student Assessment Methods:**

Tests and hands- on performance

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):

Videos

**Outline or Statement of Major Course Content:**

**Additional Special Information:** (special fees, directives on hazardous materials, etc.)

**Transfer Information:** (Please list colleges/majors that accept this course in transfer.)

**Approvals:**

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

**Distribution:** Original – Administrative Office

**Copies:** Curriculum Committee Chair, AASC Chair, Transfer Specialist, Originating Faculty Member, Scheduler, Records, Student Services, Learning Center, Library

**Revised:**