Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

**DEPT.** MACH  
**COURSE NUMBER:** 1460  
**NUMBER OF CREDITS:** 2  
**Lecture:** 1  
**Lab:** 1

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Interpreting Engineering Prints II</th>
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| Catalog Description: | Advanced training in the use of precision measuring devices including micrometers, calipers, depth micrometers, and dial indicators. The introductory level print reading topics include: interpret title block information, understand basic dimensioning symbols, learn the standard views, learn different line types, and interpret basic GD&T’s which they will apply in the shop. The student will become proficient in the reading and interpretation of blueprints and GD&T as they relate to machining. |

**FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)**

Goal 1: Communication: ____ by meeting the following competencies:

Goal 2: Critical Thinking: ____ by meeting the following competencies:

Goal 3: Natural Sciences: ____ by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: ____ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: ____ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: ____ by meeting the following competencies:

Goal 7: Human Diversity: ____ by meeting the following competencies:

Goal 8: Global Perspective: ____ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: ____ by meeting the following competencies:

Goal 10: People and the Environment: ____ by meeting the following competencies:

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<tr>
<th>Prerequisites or Necessary Entry Skills/Knowledge:</th>
<th>MACH1410 Interpreting Engineering Prints I</th>
</tr>
</thead>
</table>
### Topics to be Covered (General)

| Proper use of measuring devices. |
| Proper care for measuring devices. |
| Apply math concepts in the shop. |
| Title block |
| Dimension symbols |
| Line types |
| GD&T’s |
| Standard views |
| Machinery’s handbook |

### Student Learning Outcomes

1. Use and read micrometers
2. Use and read calipers
3. Use and read depth micrometers
4. Use and read dial indicators
5. Read blueprints and GD&T
6. Apply GD&T as it relates to drawing interpretation
7. Apply GD&T as it relates to part inspection
8. Apply GD&T as it relates to machining
9. Utilize the machinist’s handbook

### Is this course part of a transfer pathway: Yes ____ No _X_

*If yes, please list the competencies below

### All syllabi must include the following statement:

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, high school students are encouraged to notify their counselor and instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

A Member of the Minnesota State Colleges and Universities System
An Affirmative Action Equal Opportunity Educator/Employer

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