

Document Number:

Set Document Number

Departmental Course Outline Form

Abbreviated Title (25 chars max): Mechanical and Electrical
Course Title: Mechanical And Electrical Systems

Dept Abbr(s): CMSV

Course Number: 2875
Lecture Hours: 4
Lab Hours:
Total (min-max) Credits: 4 -
Registration Tally:
Lab Tally:

Catalog Description:

This course will prepare students to identify, analyze, and evaluate all aspects of building mechanical, electrical, and plumbing systems. The students will explore a variety of systems found typical in both residential and commercial buildings and will have the opportunity to gain detailed knowledge on how systems are designed, constructed, and perform. This course is designed for construction managers, project superintendants, code officials, and other construction related industry professionals.

Students completing this course will develop skills, that allow them to become familiar with the range of competencies associated with mechanical and electrical systems.

Prerequisites:

Topics: Topics covered and time allotments.

1. Building Mechanical/HVAC/Fire Systems	35%
2. Plumbing Methods and Materials	25%
3. Electrical Principles, Tools, and Safety	30%
4. Testing and Inspecting Systems	10%

If Qualifying Request for MN Transfer Curriculum, check here
and select 1 or 2 Goals and their Competencies:

1st Goal: Select a goal
Competencies:

2nd Goal: Select a goal
Competencies:

Document Number:

<p align="center">OUTCOMES:</p> <p>(Include thinking skills/thinking abilities objective(s). A minimum of <i>four</i> measurable course outcomes required.) Refer to Bloom's Taxonomy for appropriate verbs.</p>	<p align="center">OUTCOME MEASURES:</p> <p>(Indicate any activity that demonstrates student competence and ways in which the faculty member will ascertain the student learning outcomes.)</p>										
<p>The students will be able to:</p> <ol style="list-style-type: none"> 1. Identify basic fundamental concepts and components. 2. Review, analyze, and interpret construction documents, product, and technical information associated with electrical, fire, HVAC, low voltage, and plumbing systems. 3. Recognize the need and use of the systems, and how designs are dependent upon the different types of construction and/or use. 4. Evaluate information to determine compliance with specifications and standards. 5. Evaluate processes, materials, and environment. 	<p>The department has agreed that these measures must be used:</p> <p>The instructor may also use any or all of the following measures:</p> <table border="0"> <tr> <td>1. Quizzes</td> <td align="right">30%</td> </tr> <tr> <td>2. Papers</td> <td align="right">20%</td> </tr> <tr> <td>3. Classroom participation/discussion</td> <td align="right">10%</td> </tr> <tr> <td>4. Labs/field-trips</td> <td align="right">20%</td> </tr> <tr> <td>5. Final test</td> <td align="right">20%</td> </tr> </table>	1. Quizzes	30%	2. Papers	20%	3. Classroom participation/discussion	10%	4. Labs/field-trips	20%	5. Final test	20%
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4. Labs/field-trips	20%										
5. Final test	20%										

Which of the college-wide learning outcomes does this course investigate?

- Communication: Students will create shared meaning appropriate to a variety of audiences by writing and speaker.
- Critical Thinking: Students will apply creative, rational, and value-sensitive modes of thought to information and experience.
- Civic Engagement: Students will identify and address issues of public concern through individual and collective actions beyond the classroom.
- None of the Outcomes

If Special Course Fee, check here

Semesters offered (check appropriate semester(s)):

Fall:	Not Offered in Fall
Spring:	Every Spring
Summer:	Not Offered in Summer

Evaluate/Grading System (check):

A – F:	<input checked="" type="checkbox"/>	P / F:	<input type="checkbox"/>	Both:	<input type="checkbox"/>
A-NC Dev. Only:	<input type="checkbox"/>				

All changes are effective the next Fall semester unless noted _____

Check all that have changed:

New Course:	<input checked="" type="checkbox"/>
Deleted Course:	<input type="checkbox"/>
Course Title:	<input type="checkbox"/>
Number:	<input type="checkbox"/>
Hours:	<input type="checkbox"/>
Credits:	<input type="checkbox"/>
Tally:	<input type="checkbox"/>
Description:	<input type="checkbox"/>
Prereq:	<input type="checkbox"/>

Document Number:

- MTC Goal:
- Outcomes:
- Measures:
- College Wide Goals:
- Semester Offered:
- Grading:

Submitted by:

Name(s): Matt Simoneau

CURRICULUM COMMITTEE ACTION:

Academic Council Chair

Date Approved

Primary CIP Code: _____