

## PROPOSED IMPROVEMENTS

### Misc. Course Changes

- ☐ Title
- ☐ Description (attach current & proposed)
- ☐ Deletion (not required by others)
- ☐ Course #, same level
- ☐ Variable credit
- ☐ Credit/no credit
- ☐ Cross-listing
- ☐ COGE reapproval
- ☒ Other (explain\*\*)

(Master of Science in Engineering Management)

**Credit hours:**

**Existing course title:**

Proposed course title:

**Existing course prerequisite & co-requisite(s):**

Proposed course prerequisite(s)

If there are multiple prerequisites, connect with "and" or "or". To remove prerequisites, enter "none."

Proposed course co-requisite(s)

If there are multiple corequisites, they are always joined by "and."

**Proposed course prerequisite(s) that can also be taken concurrently:**

**Is there a minimum grade for the prerequisites or corequisites?**

The default grades are D for undergraduates and C for graduates.

**Major/minor or classification restrictions:**

List the Banner 4 character codes and whether they should be included or excluded.

For 5000 level prerequisites & corequisites: Do these apply to: (circle one) undergraduates    graduates    both

**Specifications for University Schedule of Classes:**

a. Course title (maximum of 30 spaces):

b. Multi-topic course: ☐ No ☐ Yes

c. Repeatable for credit: ☐ No ☐ Yes

d. Mandatory credit/no credit: ☐ No ☐ Yes

e. Type of class and contact hours per week (check type and indicate hours as appropriate)

1. ☐ Lecture                      3. ☐ Lecture/lab/discussion                      5. ☐ Independent study  
2. ☐ Lab or discussion                      4. ☐ Seminar or ☐ studio                      6. ☐ Supervision or practicum

**CIP Code (Registrar's use only):**

Chair/Director

Date \_\_\_\_\_

Chair, College Curriculum Committee

Date \_\_\_\_\_

Dean

Date:

Graduate Dean:

Date \_\_\_\_\_

Curriculum Manager: Return to dean ☐ Date \_\_\_\_\_

Forward to:

Date \_\_\_\_\_

Chair, COGE/ PEB / FS President

Date \_\_\_\_\_

**FOR PROPOSALS REQUIRING GSC/USC REVIEW:**

\* ☐ Approve ☐ Disapprove

Chair, GSC/USC

Date \_\_\_\_\_

\* ☐ Approve ☐ Disapprove

Provost

Date \_\_\_\_\_

1. Explain briefly and clearly the proposed improvement.

Course Prefix changes are needed within the program based on the previous changes from the IME prefix to the IEE and EM prefixes and the addition of special topics courses with the "EM" prefix.

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)

Course Prefix changes to align with the changes in the IEE&EM department prefixes and special topic courses.

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

NA

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

Prefix changes only.

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.

NA

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?

NA

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)

NA

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.)

NA

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program.

NA

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities.

NA

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section.

NA



# OLD Catalog Copy:

## Master of Science in Engineering Management

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↩Return to: [Catalog Search](#)

Advisor: David M. Lyth,  
Room E-222 Parkview Campus

The Master of Science in Engineering Management was developed to meet the need for professional leaders in manufacturing and service operations. It “bridges the gap” between engineering and management and it focuses on leadership and the skills necessary to manage people, money and projects. Its objectives are:

1. To enhance the capabilities to deal with resources available in commerce and industry to managing people, money, and projects.
2. To develop the leadership capabilities based on the student’s strong technical background and significant managerial skills.
3. To allow students to develop analytical and managerial skills and to acquire knowledge in related fields.
4. To develop their ability to integrate technical, managerial and systems skills to improve the performance of the enterprise.
5. To prepare students for further study in post-master’s and doctoral programs as their interest and professional growth require.

The scope of the graduate program includes studies in the areas of engineering, technical resource management, and industrial leadership. The program requires completion of a minimum of 30 semester hours beyond the entry level prerequisites in the student’s program.

### Admission Requirements

1. Possess a baccalaureate degree with a major in a technical field, such as engineering, technology, mathematics, computer science, or the physical sciences. For other majors, see item 2.
2. Show evidence of completion of at least eight semester hours of mathematics and eight semester hours of physics and/or chemistry with a minimum overall grade point average of 2.5 in these areas.
3. Submit GRE (Graduate Record Examination) scores for the General Test.
4. Undergraduate courses should have been completed in calculus, statistics, computer programming, work methods analysis, operations planning and control, and quality control. Where the student’s background is deficient, foundation courses will be required. Students may take IEE 5010 to acquire an understanding of work methods analysis, operations planning and control, and quality control.

# Program Requirements

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The Master of Science in Engineering Management requires a minimum of 30 hours: 18 hours of core courses and 12 hours of electives.

## 1. Core courses (18 hours):

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- EM 5050 - Continuous Improvement in Operations **Credits:** 3 hours
- EM 5080 - Advanced Quality Management **Credits:** 3 hours
- EM 6000 - Concepts and Principles of Engineering Management **Credits:** 3 hours
- IEE 6060 - Capital Budgeting and Cost Analysis **Credits:** 3 hours
- EM 6120 - Production/Operations Management **Credits:** 3 hours
- EM 6140 - Project Management **Credits:** 3 hours

## 2. Elective courses (12 hours at minimum)

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To be selected from a set of approved graduate courses available in the Department of Industrial and Entrepreneurial Engineering & Engineering Management and other department within the University. The elected courses must be compatible with the overall program and the career objectives of the student, and must be approved by the program advisor prior to registration. Included in the electives is IEE 6970: Problems in Industrial Engineering which allows for students to pursue independent projects and research and IEE 6990 where students can receive credit for practical training. Any EM or IEE 6000-level class can be substituted for IEE 6970.

## 3. An overall 3.0 grade point average.

# NEW Catalog Copy:

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