Michigan State University
Department of Mechanical Engineering

MANUFACTURING ENGINEERING OPTION

(13 - 16 Credits)

Many mechanical engineers are involved in manufacturing as their primary work assignment. Many more will have at least some involvement in manufacturing during their careers. The mechanical engineering program provides an opportunity for students to enhance their degree with an option in manufacturing engineering.

To complete a Bachelor of Science degree in mechanical engineering with a manufacturing engineering option, students must complete all requirements for the B.S. degree, including the following:[1]

1) ME 477 Manufacturing Processes	3 credits (Fall Only)[2]
2) ME 478 Product Development	3 credits (Spring Only)
3) ME 372 Machine Tool Laboratory[3]	1 credit (Fall, Spring)

Plus *one course* from the following list:

1) ECE 415 Computer Aided Manufacturing	3 credits (Fall Only)
2) CHE 472 Composite Materials Processing	3 credits (Fall Only)
3) MSE 426 Introduction to Composite Materials	3 credits (Spring Only)

Plus *one of these two alternatives*:

1) EC 210 Economics Principles Using Calculus	3 credits (Fall Only)
or	
2) EC 201 Introduction to Microeconomics	3 credits (Fall, Spring, Summer)
and	
EC 202 Introduction to Macroeconomics	3 credits (Fall, Spring, Summer)

CREDIT DISTRIBUTION: The nine 400-level engineering credits will be applied to the Senior Elective requirement (*not* the "design intensive" course component, however). The remaining 4 - 7 credits on the option will apply to Other Electives. Completion of the option will be noted on the final transcript.

MASTER OF SCIENCE PROGRAM: Students who are preparing for admission to the Master of Science Degree in Manufacturing and Engineering Management must also take:

1) ACC 201 Principles of Financial Accounting	3 credits (Fall, Spring, Summer)
2) ACC 202 Principles of Management Accounting	4 credits (Fall, Spring, Summer)
3) EGR 393 Engineering Cooperative Education	2 semesters @ 1 credit/semester (Fall, Spring, Summer)

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Important Note: In addition to the above requirements, the master of science degree applicant must achieve a final cumulative GPA of 3.2 or higher for the B.S. degree and begin the master's degree program the following fall semester.

[1]Several courses on the option require an override before enrolling. Contact the ME Advisor for information.
[2]ME 477 may be on the spring schedule as a special offering. Consult the Schedule of Courses website.
[3]ME 372 is required for the option, but it is not required to be eligible for the Master Science Degree in Manufacturing and Engineering Management.