

**The University of Michigan
College of Engineering
Curriculum Committee**

Agenda

December 2, 2003

1:30-3:00 p.m.

GM Room

Fourth Floor Lurie Engineering Center

1. Approval of Minutes from November 4, 2003 Meeting
2. MDDP Agreement with Bus Admin and Engineering
3. Discussion of the ABET Coordinators Committee – Jeanne Murabito
4. IOE Undergrad Program Requirement Change – Yili Liu
5. CEE Sample Schedule – Will Hansen
6. Course Approval Forms

**University of Michigan
College of Engineering
Curriculum Committee Meeting
Tuesday November 4, 2003
1:30-3:00 p.m.
Baer Room 2906 Cooley
Minutes**

Greg Hulbert called the meeting to order at 1:45 p.m.

Members Present: G.Hulbert, C. Cesnik E. Chan, J.Fessler W. Hansen, S, Montgomery, M. Parsons, J. Patel, H. Peng, R. Robertson P. Samson, S. Takayama

Members Absent: V. Chung, J. Holloway, Y.Liu, S. Pang L. Thompson

Guests: Kathleen Vargo (Undergrad Degree Progress Office)

Motion to approve the minutes of the last meeting

The minutes of the last meeting were approved

Discussion of One Page Audit – Kathleen Vargo – Undergrad Degree Progress Office

Kathleen Vargo from the Undergrad Degree Progress Office handed out copies of NA&ME's Undergraduate Program Requirements. The College is implementing a one page audit so everything needs to be clear. She noted that this issue was brought up a while back in an Undergrad Advisor's meeting and the consensus was that "D-" was accepted for HU/SS and Free Electives. NAME has specified in their handout that a passing grade is a 'C-'.

Mike Parsons said that it makes sense to have it consistent throughout the College.

Will Hansen noted that using a "C-" as the bottom passing grade contributes to grade inflation.

Mike Parsons said that if the Committee had a conclusion he would be glad to take that back to his department (NAME).

Greg Hulbert noted that if this is used it would have to be in the next College Bulletin and for now, the on-line Bulletin.

Part of this discussion is that should the role taken by NAME be adapted College wide, or should NAME be encouraged to be consistent with the rest of the College.

Susan Montgomery brought up the idea to have "C-" be a passing grade for ENGIN 100 instead of "C", since only ENGIN 100 has that rule, no other courses in the whole College have that rule.

Greg Hulbert called for a motion that subjects required by all programs – all programs should follow the College rules with regards to grades. Moved and seconded.

Motion Carried (approved)

Susan Montgomery moved that the College make the passing grade for ENGIN 100 a "C-". This will be effective Fall 03 and Winter 04, unless the present faculty teaching the course object. Seconded.

Motion Carried (approved)

Greg Hulbert said he will send a notice to the program advisors that for students taking ENGIN 100 Fall 2003 and beyond a "C-" is a passing grade.

Course Approvals

Tabled Course: IOE 516 New Course EECS has a Markov Process Course that is offered every other year. It was suggested that these courses should be cross-listed or at least not offered in the same semester. Jeff Fessler will talk to the instructor regarding this and report back to the Committee at the next meeting.

Greg Hulbert called for a motion to approve the following courses. This was moved and seconded.

Motion Carried (approved)

AOSS 431(X-listed with EECS 430) New Course

CHEM E 698 Modification – Changed Title; Changed Description: Changed Contact Hours Wk
from: Arr *to: Contact Hrs/Wk 1 Number of Wks 16.*

EECS 430 (X-Listed with AOSS 431 Modification – Added AOSS 431 as cross listing.

IOE 523 Deletion

IOE 524 New Course

MSE 330 Modification – Changed Course Number from MSE 430 *to: MSE 330*; Changed pre-requisites from: Chem 210, Phys 140/141, Math 215 or Math 285, MSE 350 *to: Chem 210, phys 140/141, Math 215 or Math 285, and preceded or accompanied by MSE 350*; Changed Level of Credit from: Ugrad or Rackham Grad *to Undergrad Only.*

MSE 335 Modification – Changed Course Number from MSE 435 *to: MSE 335*; Changed level of: credit from: Ugrad or Rackham Grad *to: Undergrad Only.*

ENGIN SA Deletions of ENGIN STUDY ABROAD COURSES.

Adjournment: Motion to adjourn was made and seconded
Motion carried (approved)

Next Meeting

Tuesday, November 18, 2003

1:30-3:00 p.m.

JOHNSON ROOMS B&C

From: Peterson, Renee
Sent: Tuesday, November 04, 2003 10:11 AM
To: kmvargo@umich.edu
Subject: Dual Degree for Undergrads btw Engin & MBS

Importance: High

Kathleen,

Greetings! Please forgive my long silence over the past few months. I had a medical emergency in mid-July.

I have attached a version of the proposal you sent me this spring, which has been changed in several areas. The changes made were necessary, as they reflect the setup of the BBA program. We are a Junior-Senior program, to which students must apply & be accepted. Therefore, I altered the wording to read "**Students originally enrolled in an undergraduate degree program in the College of Engineering who are admitted to the School of Business Administration may obtain degrees in both college(s)/school(s) simultaneously by enrolling in the Multiple Dependent Degree Program (MDDP) that has been established between the two college(s)/school(s).**"

Also, note that, since we are a Jr-Sr program, the students would be required to have MBS be the home school.

Please review this version of the proposal to ensure that its contents are acceptable to Engineering. Upon your approval, we can take it to our Deans. I am hopeful that all will run smoothly & quickly the rest of the way.

Thank you again for your patience during this time period.

I look forward to hearing from you!

Best regards,
Renee

Renee R. Peterson
Manager, Academic Services
Michigan Business School
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Ann Arbor, MI 48170-1234
734-936-3916
734-763-7804 (FAX) reneep@umich.edu



UNIVERSITY OF MICHIGAN

**Multiple Dependent Degree Programs (MDDP) Agreement:
Simultaneous Bachelor's Degrees
between
College of Engineering
and
School of Business Administration**

Students originally enrolled in an undergraduate degree program in the College of Engineering who are admitted to the School of Business Administration may obtain degrees in both college(s)/school(s) simultaneously by enrolling in the Multiple Dependent Degree Program (MDDP) that has been established between the two college(s)/school(s). This program is designed to allow students to develop a course of study that offers broader academic opportunities than would normally be possible by enrolling in only one college. These combined degrees are open to students initially enrolled in Engineering, who are accepted into the School of Business Administration's BBA program. Contact the Student Records Office in the college(s)/school(s) to obtain the application form. Refer to the College of Engineering Bulletin for the list of *Regulations* that will apply for enrollment in this program.

In order to ensure that the courses selected apply effectively and efficiently to both degrees, students must assume responsibility for maintaining liaison between their two college(s)/school advisors. The students must consult the program advisors in their degree disciplines for specific college(s)/school requirements that must be completed to receive the appropriate degrees

Degree requirements must be met for both colleges simultaneously to be eligible to receive the appropriate undergraduate degrees. Upon satisfying the program requirements of both colleges, students will receive both degrees on the same date. At the beginning of the term in which they expect to graduate, students must file a diploma application in each college(s)/school and must request their program advisor in each college to submit an appropriate notification of their eligibility for graduation to the appropriate office in the college(s)/school.

This agreement implies a grandfather clause to include at the discretion of the Schools/Colleges any students who have had continuous enrollment since turning in their appropriate documentation to both Schools/Colleges involved.

Approved by:

Levi Thompson
Associate Dean of Undergraduate Education, College of Engineering
Home Unit: ___ Yes ___X___ No
Date _____

Eugene Anderson
Associate Dean for Degree Programs
School of Business Administration
Home Unit: ___X___ Yes ___ No
Date _____

Chair, Curriculum Committee, College of Engineering
Date _____

Chair, Curriculum Committee, School of Business Administration
Date _____

Sent to the Registrar's Office for processing: _____ Date

Copies to CoE OASS: Student Records Office; Undergraduate Degree Progress Office: _____ Date



UNIVERSITY OF MICHIGAN

COLLEGE OF ENGINEERING
DEPARTMENT OF INDUSTRIAL AND
OPERATIONS ENGINEERING

IOE BUILDING
1205 BEAL AVENUE
ANN ARBOR, MICHIGAN 48109-2117
734 764-6473 FAX: 734 764-3451
<http://www.engin.umich.edu/dept/ioe/>

Date: November 18, 2003

To: College of Engineering Curriculum Committee

From: Yili Liu, Chair of IOE Curriculum Committee

Re: IOE Undergrad Program Requirement Change—
IOE 474 change from IOE electives to IOE required course

At the November 5, 2003 IOE faculty meeting, the IOE faculty made the decision to change IOE 474 (Simulation) (a 4 credit hour course) from an IOE technical elective course to a course required for IOE Undergrads. This action will reduce the IOE technical elective credit hour requirement from the current 16 credit hours to 12. We request that the College of Engineering Curriculum Committee approve this change, effective Winter Term 2004.

The main reason for this change is that the IOE faculty believes that simulation is an extremely important topic that is highly relevant to all fields of industrial engineering and should be taught to all IOE undergrads. We also recognize the fact that an overwhelming majority of industrial engineering peer institutions has simulation as a required course for industrial engineering undergrads.

I have attached the revised IOE UG Sample Schedule.

IOE Undergraduate Program

Program Requirements

	Hrs	1	2	3	4	5	6	7	8
Subjects Required by all programs									
Math 115, 116, 215, 214	16	4	4	4	4				
Engin 100, Intro to Engineering	4	4							
Engin 101, Intro to Computers	4		4						
Chemistry 125 / 130 with lab	5	5							
Physics 140 w/ lab, 240 w/ lab	10		5	5					
Humanities and Social Sciences	16		4			4	4	4	
<i>total common core</i>	55								
Related Engineering Subjects									
Non-IOE Engin courses (<i>note 1</i>)	12				4	4			4
Required Program Subjects									
IOE 201, Economic Decision Making	2			2					
IOE 202, Operations Modeling	2			2					
IOE 265, Probability and Statistics for Engineers	4			4					
IOE 310, Intro to Optimization Methods	4					4			
IOE 333, Ergonomics	3				3				
IOE 334, Ergonomics Lab	1				1				
IOE 316, Intro Markov Processes	2				2				
IOE 366, Linear Statistical Models	2				2				
IOE 373, Data Processing	4						4		
IOE 474, Simulation								4	
IOE Senior Design Course (424 or 481, or 499) (<i>note2</i>)	4								4
<i>total required IOE subjects</i>	28								
Technical Communication 380	2						2		
Technical Electives (<i>note 3</i>)	18					4	6	4	4
Free Electives	9	3						3	3
TOTAL	128	16	17	17	16	16	16	15	15

Notes:

1. Non-IOE Engineering courses: Select 11-12 hours; 3-4 hours each from any three different groups:

- ME 211 or CEE 211 or ME 240
- ME 235 or ChemE 230
- MSE 220 or ME 382
- BiomedE 458 or EECS 270 or EECS 314
- CEE 260 or NERS 211
- EECS 280 or EECS 283

2. IOE Senior Design Courses are restricted to IOE students.

3. Technical Electives (18 credits): Select at least 12 hours from IOE; at least 4 hours each must be from two of the following four groups:

- A—IOE 441, 447, 449
- B—IOE 416, 460, 461, 465, 466
- D—IOE 432, 436, 438, 439, 463
- E—IOE 421, 422, 425, 452, 453

The remaining 6 hours may be selected from any 400-level IOE course and / or from an approved list of non-IOE courses.

Departmental Technical Electives

Select at least 12 hours from IOE; At least 4 hours each must be from 2 of the following 4 groups:

IOE 441 Production and Inventory Control	IOE 432 Industrial Engineering Instrumentation Methods
IOE 447 Facility Planning	IOE 436 Human Factors in Computer Systems
IOE 449 Material Handling Systems	IOE 438 Safety Management
	IOE 439 Advanced Topic in Safety Management
IOE 416 Queueing Systems	IOE 463 Work Measurement and Prediction
IOE 461 Quality Engr Principles and Anal	
IOE 465 Design and Anal of Experiments	
IOE 460 Decision Analysis	IOE 421 Work Organizations
IOE 466 Statistical Quality Control	IOE 422 Entrepreneurship
	IOE 425 Manufacturing Strategies
	IOE 452 Corporate Finance
	IOE 453 Derivative Instruments

The remaining 6 hours may be selected from any IOE courses and / or from an approved list of non-IOE courses (see <http://ioe.engin.umich.edu> for a list and more information)

Department of Civil & Environmental Engineering
November 24, 2003

MEMORANDUM

From: Will Hansen
CEE Curriculum Committee Chair

To: Gregory M. Hulbert
COE Curriculum Committee Chair

Re: Approval of Program Change

The Department of Civil and Environmental Engineering requests COE approval of a Program Change to reflect the introduction of a new course on thermodynamics in the CEE Curriculum (CEE 230).

The introduction of this course is an outcome of the changes in thermodynamics course contents in the MEE Department and the desire by a CEE faculty member to develop a new four hour thermodynamics course. This course is better suited to meet the needs of CEE curriculum.

Although the new CEE course is offered in the Fall term only, students can still elect the ME 235 Thermodynamics I course., which is taught every term (Fall, Winter, Spring). Those who elect the ME course will have one additional hour in their unrestricted electives.

The revised sample schedule for the new curriculum is attached.

Encl. (1)

CIVIL AND ENVIRONMENTAL ENGINEERING

Sample Schedule B.S.E. Civil Engineering

Credit Hours	Terms							
	1	2	3	4	5	6	7	8
Subjects required by all programs (52 hrs.)								
Mathematics 115, 116, 215, and 216	4		4					
ENGR 100, Intro to Engr	4							
ENGR 101, Intro to Computers								
¹ Chemistry 125/126 and 130 or Chemistry 210 and 211	(5) 4							
² Physics 140 with Lab 141; 240 with Lab 241	(10) 8		4					
Humanities and Social Sciences	16	4			4			
<i>(includes one 3 or 4 hour economics course)</i>								
Advanced Mathematics (8 hrs.)								
IOE 265, Engr Probability and Statistics	4							
CEE 303, Computational Methods	4							
³Technical Core Subjects (20 hrs.)								
CEE 230, Thermodynamics	4		4					
CEE 211, Statics and Dynamics	4		4					
CEE 212, Solid and Structural Mechanics	4							
CEE 280, Environmental Principles	4							
CEE 325, Fluid Mechanics	4				4			
Program Subjects (27 hrs.)								
CEE 445, Engineering Properties of Soils	4				4			
CEE 412, Structural Engineering	4				4			
CEE 351, Civil Engineering Materials	4							
CEE 360, Environmental Process Engineering	4							
CEE 421, Hydrology and Hydraulics	4						4	
CEE 431, Construction Contracting	3							3
CEE 402, Professional Issues & Design	4							
⁴Technical Electives (9 hrs.)	9							6
⁵ Construction	CEE 432, CEE 536, CEE 537 (any two)							
⁶ Hydraulics/Hydrology	CEE 428, CEE 526							
⁷ Environmental	CEE 460 and (CEE 581 or CEE 582)							
⁸ Materials	CEE 547, CEE 554							
⁹ Geotechnical	CEE 545, CEE 546							
¹⁰ Structural	CEE 413, CEE 415							
Unrestricted Electives (12 hrs.)	12						3	3
Total	128	16	16	16	16	16	16	16

Candidates for the Bachelor of Science degree in Engineering (Civil Engineering)—B.S.E. (C.E.)—must complete the program listed above. This sample schedule is an example of one leading to graduation in eight terms.

¹Chemistry: 125, 130 or 210, 211 will count for 5 total credits, 1 of which will be applied according to individual program directives.

²Physics: 140, 141; 240, 241 will count for 10 total credits, 2 of which will be applied according to individual program directives.

³CEE will accept equivalent courses offered by other departments in the College of Engineering.

⁴In the senior year, students choose a focus area and take two technical electives in this focus area from the above list. The remaining technical elective must be taken from the above list outside of the chosen focus area.

⁵The following CEE courses are 3 credit hours: all technical electives and CEE 431.

COURSE APPROVAL FORMS

For December 2, 2003 CoE CC Meeting

EECS 230 Modification – Changing Prerequisites from: MATH 215, PHYS 240(or 260) and EECS 215 *to: MATH 215, PHYS 240 (or 260) preceded or accompanied by EECS 215.*

EECS 511 New Course

MFG 503 (X-Listed with OMS 703) Modification – Changing Level Of Credit from: Non-Rackham Grad *to: Rackham Grad and Non-Rackham Grad*; Changing Grading from: S/U *to: A-E.*

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:
 New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

Date 11/11/2003

Effective Winter 2004

A. CURRENT LISTING

B. REQUESTED LISTING

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Department EECS</td> <td style="width: 10%;">Div #</td> <td style="width: 60%;">Course Number</td> </tr> <tr> <td colspan="3">Cross Listed Course Information</td> </tr> <tr> <td colspan="3">Course Title</td> </tr> <tr> <td style="font-size: small;">TITLE ABBRE- VIATION</td> <td style="font-size: small;">Time Sched Max = 19 Spaces Transcript Max = 20 Spaces</td> <td>Electromagnetics I EMAG I</td> </tr> <tr> <td colspan="3">Course Description Electric charge and current. Traveling waves and phasors. Transmission lines; sinusoidal analysis and transient response. Vector calculus. Electrostatics. Magnetostatics. 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Approval

- Curriculum Comm. _____
- Faculty _____
- Rackham _____
- Cross listed Unit 1 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. EECS [Signature] 2003-11-25
 Cross-listed Dept(s) _____

SUPPORTING STATEMENT

Changed EECS 215 from a prerequisite to a co-requisite. In the traditional approach to electromagnetics that starts with electrostatics, the only real background needed is the qualitative understanding of fields that students gain in Physics 240, which is now a prerequisite. The only time the student needs EECS 215 material is near the end of the course, when phasors are discussed in the context of time-varying fields and plane waves. By that time, a student taking EECS215 concurrently with EECS230 would have encountered phasors in that circuits course.

Approved by ECE Faculty 2003-11-13

Are any special resources or facilities required for this course?

Yes No

Detail the Special requirements

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:
 New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

Date 9/24/2003
 Effective Winter 2004

A. CURRENT LISTING

B. REQUESTED LISTING

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Approval

- Curriculum Comm. _____
- Faculty _____
- Rackham _____
- Cross listed Unit 1 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. EECS [Signature] 2003-11-19

Cross-listed Dept(s): _____

SUPPORTING STATEMENT

This course was introduced as a 598 special topics class in fall 2002. The enrollment was large - about 45 students. The response from the students was extremely positive. Many commented that this was one of the best classes they had taken at Michigan.

This class fills a big hole in our circuits curriculum but also be of interest to those specializing in MEMS, microsystems, RF, wireless and VLSI. At the moment there is only one 500 level analog circuits class (EECS 522), however there is a great deal of interest from graduate and undergraduate students in analog circuits.

With the hiring of Ranjit Gharpurey, we now have two faculty members specializing in analog circuits. We can comfortably handle the existing analog classes (i.e. 311, 413, 522) and the new class. 311 and 413 are fall classes, and 522 is offered in the Winter.

The new class will be a mixture of theory and design experience.

Approved by ECE Faculty 2003-11-12

Are any special resources or facilities required for this course?

Yes No

Detail the Special requirements

Henia G. Kamil, 11/24/03 11:47 AM -0500, course approval form number 1209

1

X-Sender: hek@srvr5.engin.umich.edu
 Date: Mon, 24 Nov 2003 11:47:12 -0500
 To: jrwolfe@umich.edu
 From: "Henia G. Kamil" <hek@umich.edu>
 Subject: course approval form number 1209
 Cc: hek@umich.edu
 Status:

Judy,
 I just prepared the course approval form 1209 - MFG 503 Manufacturing Project.

If you recall last winter term we submitted course approval form 1087 with the same request. I am resubmitting the request which was not approved by the RO to change from S/U to Graded because it was done after the beginning of the term.

I also added the Rackham Graduate because student pursuing the MS IOE with TMI are Rackham students and enroll in this course.

The form should be signed by tomorrow and we will forward it to you for curriculum committee.

Thank you in advance

Henia

--

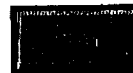
Henia G. Kamil
 University of Michigan
 1539 HH Dow Building
 2300 Hayward Street
 Ann Arbor, MI 48109-2136
 Phone: 734-764-3071
 Fax: 734-647-0079
 email: hek@engin.umich.edu

Post-It® Fax Note	7671	Date	11/2/03	# of pages	▶
To	Judy	From	Henia		
Co./Dept.		Co.			
Phone #		Phone #	4-3071		
Fax #	77126	Fax #	7-0079		

Printed for "Henia G. Kamil" <hek@umich.edu>

1

THE UNIVERSITY OF MICHIGAN -- COLLEGE OF ENGINEERING
 Course Approval Request
 College Curriculum Committee, 1420 Lurie Engineering Center Building



Form Number
1225

Action Requested

- New Course
- Modification of Existing Course
- Deletion of Course

Complete the following sections:
 New Courses - B & C completely
 Modifications - A modified information, B & C completely
 Deletions - A & C completely

Date 11/24/2003
 Effective Winter 2004

A. CURRENT LISTING

B. REQUESTED LISTING

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Department</td> <td style="width: 10%;">Div #</td> <td style="width: 60%;">Course Number</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td colspan="3">Cross Listed Course Information</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td colspan="3">Course Title</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td style="width: 15%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 70%;"> </td> </tr> <tr> <td> </td> <td>Transcript Max = 20 Spaces</td> <td> </td> </tr> <tr> <td colspan="3">Course Description</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td colspan="3">PROGRAM OUTCOMES:</td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k </td> </tr> <tr> <td colspan="3"> Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective </td> </tr> <tr> <td colspan="3">Prerequisites <input type="radio"/> Enforced <input type="radio"/> Advised</td> </tr> <tr> <td colspan="3">Credit Restrictions</td> </tr> <tr> <td>Level of Credit</td> <td>Credit Hours</td> <td>Contact Hrs/Wk</td> </tr> <tr> <td> <input type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input checked="" type="checkbox"/> Non-Rackhm Grad <input type="checkbox"/> Ugrad or Rackhm Grad <input type="checkbox"/> Ugrad or Non-Rackhm Grad </td> <td> Min Max 3 3 </td> <td> 3 Number of Wks 14 </td> </tr> </table>	Home Department	Div #	Course Number				Cross Listed Course Information						Course Title						TITLE ABBREVIATION	Time Sched Max = 19 Spaces			Transcript Max = 20 Spaces		Course Description						PROGRAM OUTCOMES:			<input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d <input type="checkbox"/> e <input type="checkbox"/> f <input type="checkbox"/> g <input type="checkbox"/> h <input type="checkbox"/> i <input type="checkbox"/> j <input type="checkbox"/> k			Degree Requirements <input type="radio"/> Degree Requirement <input type="radio"/> Tech Elective <input type="radio"/> Core Course <input type="radio"/> Other <input type="radio"/> Free Elective			Prerequisites <input type="radio"/> Enforced <input type="radio"/> Advised			Credit Restrictions			Level of Credit	Credit Hours	Contact Hrs/Wk	<input type="checkbox"/> Undergrad only <input type="checkbox"/> All Credit types <input type="checkbox"/> Rackham Grad <input type="checkbox"/> Rackhm Grad w/add'l Work <input checked="" type="checkbox"/> Non-Rackhm Grad <input type="checkbox"/> Ugrad or Rackhm Grad <input type="checkbox"/> Ugrad or Non-Rackhm Grad	Min Max 3 3	3 Number of Wks 14	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Home Department</td> <td style="width: 10%;">Div #</td> <td style="width: 60%;">Course Number</td> </tr> <tr> <td>MFG</td> <td> </td> <td>503</td> </tr> <tr> <td colspan="3">Cross Listed Course Information</td> </tr> <tr> <td colspan="3">OMS 703</td> </tr> <tr> <td colspan="3">Course Title</td> </tr> <tr> <td colspan="3">MANUFACTURING PROJECT</td> </tr> <tr> <td style="width: 15%;">TITLE ABBREVIATION</td> <td style="width: 15%;">Time Sched Max = 19 Spaces</td> <td style="width: 70%;">Manufacturing Project</td> </tr> <tr> <td> </td> <td>Transcript Max = 20 Spaces</td> <td>Mfg. 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Approval

Curriculum Comm. _____

Faculty _____

Rackham _____

Cross listed Unit 1 _____

Submitted By: Home Dept. Cross-listed Dept.

Name, Signature & Department
 Home Dept. S. Jack Hu *[Signature]*
 Cross-listed Dept(s). James Reese *[Signature]*

Post-it® Fax Note

7671

Date 11/2/03 # of pages 1

