

Name \_\_\_\_\_ I.D. No. \_\_\_\_\_

## MECHANICAL ENGINEERING Curriculum Sheet REVISED 7-14-08

### Fall Semester – Year 1

	<u>Cr.</u>	<u>Grade</u>
ENG 101 English I	4	_____
MTH 181 Calculus I	4	_____
CHM 261 General Chemistry I	4	_____
CHM 266 General Chem. Lab I	1	_____
ESC 120 Intro. to Engineering Design***	2	_____
ESC 100 New Student Orientation*	1	_____

### Fall Semester – Year 2

	<u>Cr.</u>	<u>Grade</u>
ESC 250 Differential Equations for Engineers	3	_____
PHY 242 Univ. Physics II	5	_____
ESC 201 Statics	3	_____
IME 250 Material Processing and Metrology	3	_____
IME 251 Material Processing and Metr. Lab	1	_____
MTH 283 Multivariable Calculus	2	_____

### Fall Semester – Year 3

	<u>Cr.</u>	<u>Grade</u>
MCE 305 Kinematics & Dyn. of Machinery	4	_____
ESC 301 Fluid Mechanics	3	_____
ESC 321 Thermodynamics I	3	_____
MCE 371 Vibrations	4	_____
ESC 310 Engineering Statistics and Probability	3	_____

### Fall Semester – Year 4

	<u>Cr.</u>	<u>Grade</u>
MCE 450 Design Project I (Writing)	2	_____
ESC 282 Engineering Economy	3	_____
PHL 215 Engineering Ethics (Writing)	3	_____
MCE 441 Intro. to Linear Control Systems	4	_____
MCE Lab	3	_____
Elective _____	3	_____
Gen Ed	3	_____
Elective _____	3	_____

### Spring Semester – Year 1

	<u>Cr.</u>	<u>Grade</u>
ESC 102 Tech. Writing & Prof. Communication	3	_____
MTH 182 Calculus II	4	_____
PHY 241 University Physics I	5	_____
ESC 152 Programming with Matlab	3	_____
ESC 270 Materials Science	3	_____
CSC 121 Career Orientation**	1	_____

### Spring Semester – Year 2

	<u>Cr.</u>	<u>Grade</u>
ESC 350 Linear Algebra and Numerical Methods in Engineering	3	_____
MCE 255 Computer-Aided Engineering	4	_____
ESC 202 Dynamics	3	_____
ESC 211 Strength of Materials	3	_____
ESC 315 Electrical Engineering Concepts	3	_____

### Spring Semester – Year 3

	<u>Cr.</u>	<u>Grade</u>
MCE 324 Introduction to Heat Transfer	4	_____
MCE 367 Machine Design I	4	_____
MCE 380 Instrumentation/Measurements lab	3	_____
MCE 421 Applied Thermodynamics	4	_____
Gen Ed	3	_____
Elective _____	3	_____

### Spring Semester – Year 4

	<u>Cr.</u>	<u>Grade</u>
MCE 451 Design Project II (Writing)	2	_____
MCE	4	_____
Elective _____	4	_____
MCE	4	_____
Elective _____	4	_____
Gen Ed	3	_____
Elective _____	3	_____
Gen Ed Elective	3	_____

\*Not required for transfer students.

\*\*Optional course. Required for participation in co-op and internship programs

\*\*\*Required for freshmen and transfer students admitted to Engineering College Fall, 2003 and after.

Minimum number of credits required for degree (excluding orientation and co-op): 135

Name \_\_\_\_\_ I. D. \_\_\_\_\_

No. \_\_\_\_\_

# MECHANICAL ENGINEERING

## Co-op Curriculum Sheet

REVISED 7-14-08

<u>Year 1</u> <u>Fall Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Spring Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Summer Semester</u>		
ENG 101 English I	4	_____	ESC 102 Tech. Writing and	3	_____	Work or School		
MTH181 Calculus I	4	_____	Professional Communication					
CHM 261 Gen. Chemistry I	4	_____	MTH 182 Calculus II	4	_____			
CHM 266 Gen. Chem. Lab I	1	_____	PHY 241 Univ. Physics I	5	_____			
ESC 120 Intro. to Engineering Design**	2	_____	ESC 270 Material Science	3	_____			
ESC 100 New Student Orient*	1	_____	ESC 152 Program. with Matlab	3	_____			
			CSC 121 Career Orientation***	1	_____			
<u>Year 2</u> <u>Fall Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Spring Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Summer Semester</u>	<u>Cr.</u>	<u>Grade</u>
ESC 250 Differential Equations for Engineers	3	_____	ESC 350 Linear Algebra. and Num. Methods in Engineering	3	_____	Co-op: ESC 300	1	_____
PHY 242 Univ. Physics II	5	_____	MCE 255 Computer-Aided Engineering	4	_____			
ESC 201 Statics	3	_____	ESC 202 Dynamics	3	_____			
IME 250 Material Processing and Metrology	3	_____	ESC 211 Strength of Materials	3	_____			
IME 251 Material Proc./Metr. lab	1	_____	ESC 315 Electrical Engineering Concepts	3	_____			
MTH 283 Multivariable Calculus for Engineers	2	_____						
<u>Year 3</u> <u>Fall Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Spring Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Summer Semester</u>	<u>Cr.</u>	<u>Grade</u>
MCE 305 Kinematics and Dynamics of Machinery	4	_____	Co-op: ESC 300	1	_____	Gen Ed Elective _____	3	_____
ESC 301 Fluid Mechanics	3	_____				Gen Ed Elective _____	3	_____
ESC 321 Thermodynamics	3	_____						
MCE 371 Vibrations	4	_____						
ESC 310 Engineering Statistics and Probability	3	_____						
<u>Year 4</u> <u>Fall Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Spring Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Summer Semester</u>	<u>Cr.</u>	<u>Grade</u>
Co-op: ESC 300	1	_____	MCE 324 Intro. to Heat Transfer	4	_____	Co-op: ESC 300	1	_____
			MCE 367 Machine Design I	4	_____			
			MCE 380 Instrumentation and Measurements Lab	3	_____			
			MCE 421 Applied Thermodynamics II	4	_____			
<u>Year 5</u> <u>Fall Semester</u>	<u>Cr.</u>	<u>Grade</u>	<u>Spring Semester</u>	<u>Cr.</u>	<u>Grade</u>			
ESC 282 Engineering Economy	3	_____	MCE 451 Design Project II (Writing)	2	_____			
MCE 450 Design Project 1 (Writing)	2	_____	MCE Elective	4	_____			
MCE 441 Intro. to Linear Control Systems	4	_____	MCE Elective	4	_____			
PHL 215 Engineering Ethics	3	_____	Gen Ed	3	_____			
MCE Lab Elective	3	_____	Gen Ed	3	_____			

\*Not required for transfer students.

\*\*Required for freshman and transfer students admitted to Engineering College Fall, 2003 and after.

\*\*\* Required for participation in co-op and internship programs.

Minimum number of credits required for degree (excluding orientation and co-op): 135