

# CLEVELAND STATE UNIVERSITY

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

## MECHANICAL ENGINEERING Curriculum Sheet REVISED 11-22-04

### 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          | _____        |

### Spring Semester – Year 1

|   | <u>Cr.</u> | <u>Grade</u> |
|---|------------|--------------|
| MCE 102 Tech. Writing & Prof. Communication | 2          | _____        |
| MTH 182 Calculus II                         | 4          | _____        |
| PHY 241 University Physics I                | 5          | _____        |
| ESC 151 C Programming                       | 3          | _____        |
| ESC 270 Materials Science                   | 3          | _____        |
| CSC 121 Career 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          | _____        |

### 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          | _____        |
| Gen Ed Elective _____                                       | 3          | _____        |

### 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          | _____        |

### 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 Elective _____                    | 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 Elective _____                   | 3          | _____        |
| Gen Ed Elective _____                    | 3          | _____        |

### Spring Semester – Year 4

|                                     | <u>Cr.</u> | <u>Grade</u> |
|-------------------------------------|------------|--------------|
| MCE 451 Design Project II (Writing) | 2          | _____        |
| MCE Elective _____                  | 4          | _____        |
| MCE Elective _____                  | 4          | _____        |
| Gen Ed 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): 137