

# MECHANICAL ENGINEERING Program Balance Sheet - UW Colleges/ UW-Platteville Equivalencies

Student Name: \_\_\_\_\_ Date \_\_\_\_\_ General Ed. Requirements: \_\_\_Met w/ Bachelor's \_\_\_Met w/Associate \_\_\_Will be met w/ Assoc.

## Pre-Engineering

### Mathematics -- 19 Credits

- \_\_\_ 5 \***MAT 221** (Math 2640) **Calculus & Analytic Geom I** \_\_\_\_\_
- \_\_\_ 5 \***MAT 222** (Math 2740) **Calculus & Analytic Geom II** \_\_\_\_\_
- \_\_\_ 3 **MAT 223** (Math 2840) **Calculus & Analytic Geom III** \_\_\_\_\_
- \_\_\_ 3 **MAT 271** (Math 3630) **Ordinary Diff Equations** \_\_\_\_\_
- \_\_\_ 3 **MAT 240** (Math 4030) **Statistical Analysis** \_\_\_\_\_

### Basic Sciences – 13/20 Credits

- \_\_\_ 5/10\***CHE 165** (Chem 1450) **Chemistry for Engineers** \_\_\_\_\_  
or **CHE 145 & 155** (CHEM 1140 & 1240) **Gen Chemistry I & II** \_\_\_\_\_
- \_\_\_ 5/4 \***PHY 201** (Phys 2240) **University Physics I** \_\_\_\_\_
- \_\_\_ 5/4 **PHY 202** (Phys 2340) **University Physics II** \_\_\_\_\_

### Other Courses – 12 Credits

- \_\_\_ 3 \***EGR 105** (GE 1000 & GE 1030) **Engr Fundamentals** \_\_\_\_\_
- \_\_\_ 3 \***EGR 110** (GE 2030) **Engr Graphics w/Cmptr Drft** \_\_\_\_\_
- \_\_\_ 3 **EGR 282** (GE 2820) **Engineering Economics** \_\_\_\_\_
- \_\_\_ 3 \***ENG 101** (ENGL 1130) **Composition I** \_\_\_\_\_

### Engineering Sciences -- 13 Credits

- \_\_\_ 3 **EGR 201** (GE 2130) **Statics** \_\_\_\_\_
- \_\_\_ 3 **EGR 202** (GE 2230) **Dynamics** \_\_\_\_\_
- \_\_\_ 4 **EGR 203** (GE 2340) **Mechanics of Materials** \_\_\_\_\_
- \_\_\_ 3 GE 2930 **Applications of Electrical Engr** \_\_\_\_\_

**Note:** \*Students must earn a 2.6 GPA in these courses to matriculate out of General Engineering and into the Mechanical Engineering program.  
Classes in bold print are UW Colleges courses that are equivalent to required UW-Platteville courses. Students must receive a grade of C or better in Math 2640, Math 2740, Math 2840, Phys 2240, GE 2130 and GE 2340.  
An Associate of Arts and Science degree from UW Colleges satisfies the UW-Platteville general education requirements.

## Professional Mechanical Engineering -- 50 Credits

*(2.0 GPA minimum required)*

- \_\_\_ 3 ME 2630 **Thermodynamics** \_\_\_\_\_
- \_\_\_ 3 ME 3030 **Dynamical Systems** \_\_\_\_\_
- \_\_\_ 3 ME 3040 **Engineering Materials** \_\_\_\_\_
- \_\_\_ 3 ME 3230 **Manufacturing Processes** \_\_\_\_\_
- \_\_\_ 3 ME 3300 **Fluid Dynamics** \_\_\_\_\_
- \_\_\_ 3 ME 3330 **Design of Machine Elements** \_\_\_\_\_
- \_\_\_ 3 ME 3430 **Intro to Computational Methods** \_\_\_\_\_
- \_\_\_ 3 ME 3640 **Heat Transfer** \_\_\_\_\_
- \_\_\_ 3 ME 3720 **Mechanical Systems Lab** \_\_\_\_\_
- \_\_\_ 3 ME 3830 **Mechanisms and Machines** \_\_\_\_\_
- \_\_\_ 3 ME 4330/EE3310 **Automatic Controls** \_\_\_\_\_
- \_\_\_ 2 ME 4720 **Thermal Systems Lab** \_\_\_\_\_
- \_\_\_ 3 ME 4730 **Thermo-Fluid Systems Design** \_\_\_\_\_
- \_\_\_ 3 ME 4930 **Senior Design Project** \_\_\_\_\_
- \_\_\_ 3 ME Technical Elective: \_\_\_\_\_
- \_\_\_ 3 ME Technical Elective: \_\_\_\_\_
- \_\_\_ 3 ME Technical Elective: \_\_\_\_\_

### **ME Technical Elective Suggestions:**

If you have a particular area of interest in mechanical engineering, you might find the following list useful as you choose your systems design elective and technical electives:

#### **Area of Interest**

- Mechanical Design:
- Thermal Fluid Design:
- Materials:
- Controls/Mechatronics:
- Other:

#### **Course Suggestions**

- ME 4500, 4640, 4800, 4840, 4850
- ME 4500, 4520, 4550, 4600, 4630, 4650
- ME 4430, 4440, 4500
- ME 4830, EE4310
- ME 4750, ME 4980

