

# Mechanical Engineering Technology, B.S., Manufacturing Concentration

303-556-2976 Plaza Building 262

Catalog 13-14

## School of Professional Studies

This sheet applies to the 2013-2014 catalog *only*. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors *must* work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

General Studies	42 min
Major courses	51
Additional requirements	11
Concentration	25
<b>Total to graduate (min. 40 hrs upper division)</b>	<b>129</b>

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

### \*TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS

#### Written Communication

- \_\_\_ ENG 1010 (3hrs) Composing Arguments\*  
**OR** ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II\*  
 \_\_\_ ENG 1020 (3hrs) Freshman English: Rsrch, Anly, & Documt. (must be completed within 45-credit hours)

#### Oral Communication\*

- \_\_\_ SPE 1010 (3 hrs) Public Speaking

#### Quantitative Literacy\*: students must earn a grade of "C" or higher

- \_\_\_ MTH 1410 (4 hrs) Calculus I  
 or MTH 1400 (4 hrs) Pre-Calculus & MTH 1410 (4 hrs) Calculus I  
**(Note: MTH 1110-4 College Algebra & MTH 1120-3 Trigonometry may substitute for MTH 1400).**

#### Arts & Humanities

- \_\_\_ PHI 1030 (3 hrs) Introduction to Ethics  
 \_\_\_ (3 hrs)

#### Historical

- \_\_\_ (3 hrs)

#### Social & Behavioral Sciences I

- \_\_\_ ECO 2010 (3 hrs) Principles of Economics: Macro

#### Social & Behavioral Sciences II

- \_\_\_ (3 hrs)

#### Natural & Physical Sciences

- \_\_\_ CHE 1800 (4 hrs) General Chemistry I  
 \_\_\_ PHY 2311 (4 hrs) General Physics I  
 \_\_\_ PHY 2321 (1 hr) General Physics I Lab  
 \_\_\_ PHY 2331 (4 hrs) General Physics II  
 \_\_\_ PHY 2341 (1 hr) General Physics II Lab

#### Global Diversity May be satisfied within general studies

- \_\_\_ (3 hrs)

MAJOR COURSES: For every MET course, a minimum grade of "C" is required for all prerequisites before a student can progress.

- \_\_\_ **MET 1000 (3 hrs) Introduction to Mechanical Engineering Technology**  
 \_\_\_ **MET 1010 (3 hrs) Manufacturing Processes**  
 \_\_\_ MET 1200 (3 hrs) Technical Drawing I  
 \_\_\_ MET 1210 (3 hrs) 3D Modeling  
 \_\_\_ MET 1310 (3 hrs) Principles of Quality Assurance  
 \_\_\_ MET 2200 (3 hrs) Materials of Engineering  
 \_\_\_ MET 3110 (3 hrs) Thermodynamics  
 \_\_\_ MET 3160 (3 hrs) Mechanics II-Dynamics  
 \_\_\_ MET 3180 (3 hrs) Fluid Mechanics I  
 \_\_\_ MET 3210 (4 hrs) Introduction to Computer Aided Engineering  
 \_\_\_ MET 3410 (3 hrs) Geometric Dimensioning and Tolerancing  
 \_\_\_ MET 4000 (3 hrs) Project Engineering  
 \_\_\_ CET 2150 (3 hrs) Mechanics I-Statics  
 \_\_\_ CET 3135 (4 hrs) Mechanics of Materials with Laboratory

#### Additional Technical Requirements

- \_\_\_ EET 2000 (3 hrs) Electric Circuits & Machines  
 \_\_\_ EET 3010 (4 hrs) Industrial Electronics

#### Additional Requirements

- \_\_\_ COM 2610 (3 hrs) Introduction to Technical Writing  
 \_\_\_ MTH 1410 (4 hrs) Calculus I  
 \_\_\_ MTH 2410 (4 hrs) Calculus II

#### Computer Aided Manufacturing Concentration

- \_\_\_ MET 3000 (4 hrs) Manufacturing Analysis  
 \_\_\_ MET 3100 (3 hrs) N/C Computer Programming  
 \_\_\_ MET 3250 (3 hrs) Tool Design & Production Tooling  
 \_\_\_ MET 3300 (3 hrs) Statistical Process Control  
 \_\_\_ MET 3330 (3 hrs) Robotics for Manufacturing  
 \_\_\_ MET xxxx (3 hrs) Upper-Division Elective  
 \_\_\_ MET 4010 (3 hrs) Advanced Manufacturing Technology (Sr. Experience)  
 \_\_\_ MET 4080 (3 hrs) Computer Aided Manufacturing

#### Multicultural Requirement

(May be satisfied within General Studies)

#### **Electives**