

**THE UNIVERSITY OF AKRON  
AKRON OHIO  
SUMMIT COLLEGE**

**MECHANICAL ENGINEERING TECHNOLOGY  
2920: Associate of Applied Science Degree**

Accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology,  
111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - Telephone (410) 347-7700.

**FIRST YEAR****Fall Semester**

|  | <b><u>Credit Hours</u></b> | <b><u>Prerequisites/Corequisites</u></b>                       |
|--|----------------------------|--|
| 2020:121 English <b>OR</b>                             |                            | Placement Test   |
| 3300:111 English Composition I                         | 4                          |  |
| 2920:100 Survey of Mechanical Eng. Tech.               | 2                          |  |
| 2030:153 Technical Mathematics III                     | 2                          | 2030:152 or equiv with grade of C- or better or placement test |
| 2820:161 Technical Physics: Mechanics I (Sch. Lab)     | 2                          | 2030:153 Coreq   |
| 2820:162 Technical Physics: Mechanics II (Sch. Lab)    | 2                          | 2820:161; 2030:153   |
| 7600:105 Intro. to Public Speaking <b>OR</b>           |                            |  |
| 7600:106 Effective Oral Communication <b>OR</b>        |                            |  |
| 2540:263 Professional Communications and Presentations | 3                          |  |
| 2940:121 Technical Drawing I (Sch. Lab)                | <u>3</u>                   |  |
|  | 18                         |  |

**Spring Semester**

|   |          |  |
|---|----------|--|
| 2030:154 Technical Mathematics IV                     | 3        | 2030:153 or equiv with a grade of C- or better or placement test |
| 2820:131 Software Appl. for Technology. (Sch. Lab)    | 1        | 2030:151   |
| 2820:163 Technical Physics: Elect. & Magn. (Sch. Lab) | 2        | 2820:161; 2030:153   |
| 2820:164 Technical Physics: Heat and Light (Sch. Lab) | 2        | 2820:161; 2030:153   |
| 2020:222 Technical Report Writing <b>OR</b>           |          | 3300:111; 2020:121 or equiv.                                     |
| 3300:112 English Composition II                       | 3        | 3300:111; 2020:121 or equiv.                                     |
| 2940:210 Computer Aided Drawing I (Sch. Lab)          | 3        |  |
| 2990:125 Statics                                      | 3        | 2820:162 & 2030:153  |
| 5540:xxx Physical Education                           | <u>1</u> |  |
|   | 18       |  |

**SECOND YEAR****Fall Semester**

|   |          |  |
|---|----------|--|
| 2920:101 Intro. to Mechanical Design (Sch. Lab) | 3        | 2940:121 Prereq; 2030:154 Coreq                                |
| 2030:255 Technical Calculus I                   | 3        | 2030:154 or equiv with grade of C- or better or placement test |
| 2870:348 CNC Programming I                      | 3        | 2030:154; 2940:121 or Perm.                                    |
| 2920:243 Kinematics                             | 3        | 2920:101 Coreq; 2990:125                                       |
| 2920:251 Fluid Power                            | 2        | 2820:162; 2820:164   |
| 2990:225 Strength of Materials                  | <u>3</u> | 2990:125   |
|   | 17       |  |

**Spring Semester**

|   |          |                                    |
|---|----------|------------------------------------|
| 2040:240 Human Relations                          | 3        |                                    |
| 2040:242 American Urban Society <b>OR</b>         |          |                                    |
| 2040:247 Survey of Basic Economics                | 3        |                                    |
| 2920:245 Mechanical Design II (Sch. Lab)          | 5        | 2920:142 Coreq; 2940:210; 2990:225 |
| 2920:249 Applied Thermal Energy I                 | 2        | 2920:243 Coreq                     |
| 2920:252 Thermo-Fluids Lab                        | 1        | 2030:255; 2820:164                 |
| 2920:142 Introduction to Material Tech (Sch. Lab) | <u>3</u> | 2920:251; 2920:249 Coreq           |
|   | 17       |                                    |

**TOTAL CREDITS = 70**

## **Careers and Opportunities**

Mechanical Engineering Technology is concerned with the design of products and the machines required to manufacture them. Mechanical technicians are needed in all industries, from steelmaking to consumer products such as tires, cars, and home appliances. Mechanical technicians work along with engineers in design, testing, manufacturing, and servicing of the mechanical components and systems found everywhere in industry. The associate degree holder is well qualified to begin working in the various areas of mechanical technology, and typical opportunities include the following:

Junior or Assistant Designer - Designing machine elements and/or systems.

Engineering Aide - Assists the mechanical engineer, a good beginning for the inexperienced graduate.

Laboratory Technician - Primarily responsible for evaluation of product or process diagnosis. May do field testing (tires, cars, etc.). Specifying materials from the design and processing standpoints.

Customer Service Technician - Installs and maintains equipment on site. May also serve as sales representative in recommending a machine for a particular application.

Plant Engineering - Establishing maintenance schedules and applying tool and machine design to production process.

Draftsman - Junior or Senior - Work toward heading drafting room.

With maturity and the experience gained on the job, and specializing in one of the above areas, the technician may rise to designer, head of testing laboratory, service manager, tool room supervisor, production foreman, plant maintenance supervisor, and with additional education and specialized training, he/she may reach positions of middle management responsibility. He/she is the liaison between the engineer and shop.

Other opportunities exist in cost estimation, purchasing, power generation, and almost any area that requires a liaison who speaks and understands the language of technology.

## **Second Year**

Scheduling for the second year of this program should be done with the Summit College Advising Office, Polsky 301, 330-972-7220, to guarantee proper sequence and completion of all requirements for graduation.

## **Placement**

A student is encouraged to check with his/her major department and with the Placement Office regarding employment opportunities in the field.

## **Cooperative Education**

Co-op is available on an optional basis in this academic program. To obtain additional information on program benefits, eligibility requirements, or to apply for the program, contact the Co-op staff at 330-972-7747 no later than the beginning of the second semester of school.