In the Machine Tool Technology classes at Cowley College, students are trained on machine tools that are the standard of the industry. Students will find lathes, milling machines, precision-grinding equipment, and many other machine tools, all of which are of state-of-the-art design. Many of our machines are computer-controlled; students have the opportunity to learn computer numerical controlled programming of these machines for complex and sophisticated machining processes. Students will also learn quality control methods using the latest measuring and inspection instrumentation. With this type of equipment, students are able to produce aerospace-quality projects. Industry support has made it possible to take classes on field trips, which give greater dimension to the student experience.

### MACHINE & TOOL TECHNOLOGY
Associate of Applied Science Degree

<table>
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<tr>
<th>COURSE NUMBER</th>
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#### GENERAL EDUCATION REQUIREMENTS

**Basic Skills (12 hours)**

- **COM2725** or **ENG2211**
  - Interpersonal Communications or Composition I (English elective)
  - SEMESTER 3
- **PSY6711**
  - General Psychology (Social Science elective)
  - SEMESTER 3
- **LED1448**
  - Introduction to Leadership (Leadership elective)
  - SEMESTER 3
- **PHO6460**
  - Ethics (Humanities elective)
  - SEMESTER 3

**Computer Literacy (3 hours)**

- **CAP1516**
  - Computer Applications or Computer Literacy*
  - SEMESTER 3

#### GENERAL EDUCATION HOURS 15

| 3 | 3 | 3 | 6 |

#### TECHNICAL REQUIREMENTS

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<th>COURSE NUMBER</th>
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- **INR3718**
  - OSHA 10
  - SEMESTER 1
- **MTT3561**
  - Machining I
  - SEMESTER 3
- **MTT3562**
  - Machining II
  - SEMESTER 3
- **MTT3563**
  - Bench Work
  - SEMESTER 1
- **MTT3564**
  - Quality Control Inspection
  - SEMESTER 1
- **MTT3565**
  - Metallurgy
  - SEMESTER 1
- **INR3717**
  - Blueprint Reading
  - SEMESTER 3
- **MTT3566**
  - Machining III
  - SEMESTER 3
- **MTT3567**
  - Machining IV
  - SEMESTER 3
- **MTT3568**
  - Machine Tool Processes
  - SEMESTER 1
- **MTT3569**
  - Work Place Ethics
  - SEMESTER 2
- **INR3716**
  - Technical Math or higher
  - SEMESTER 3
- **INR3713**
  - Applied Economics (Economics electives)
  - SEMESTER 3
- **MTT3570**
  - CNC Machining
  - SEMESTER 6
- **MTT3571**
  - CNC Operations
  - SEMESTER 3
- **MTT3572**
  - CAD/CAM I
  - SEMESTER 4
- **MTT3573**
  - CAD/CAM II
  - SEMESTER 4
- **MTT3574**
  - CAD/CAM III
  - SEMESTER 4

#### TECHNICAL HOURS 49

| 13 | 12 | 12 | 12 |

#### TOTAL HOURS 64

| 16 | 15 | 15 | 18 |

Entrance Assessment may be required.

*See List of Electives that fulfill Requirements for Computer Literacy.*

Depending on skill level and assessment scores, students may be required to take the necessary basic skill or prerequisite courses prior to enrolling in the program.

Revised: April 18, 2016