

**Program Information**

The Anoka Technical College Mechanical CAD Operator certificate is a 25-credit program that consists of technical courses designed to develop skills in mechanical drafting.

In addition to drafting and detailing skills, the students receive training in related areas such as industrial materials, manufacturing methods, and professional communication. Students also receive hands-on training in Anoka Technical College's computer aided drafting lab. (AutoCAD, Inventor, ProE/Creo, and Solidworks)

The primary goal of the Mechanical Drafting and Design program is to provide all graduates with the solid technical foundation necessary to ensure their success in a wide variety of employment opportunities.

**Program Learning Outcomes**

By completing this program, students will achieve the following learning outcomes.

- Apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities.
- Apply written, oral, and graphical communication in both technical and non-technical environments; and identify and use appropriate technical literature.
- Understand the need for and an ability to engage in self-directed continuing professional development.
- Commit to quality, timeliness, and continuous improvement.
- Demonstrate knowledge and technical competency appropriate to the objectives of the program in engineering materials, applied mechanics, and manufacturing methods.
- Demonstrate knowledge and technical competency appropriate to the objectives of the program in applied drafting practice emphasizing mechanical components and systems, as well as fundamentals of descriptive geometry, orthographic projection, sectioning, tolerancing and dimensioning, and basic computer aided drafting and design with technical depth in at least one of these areas.

**Course Prerequisites**

Some courses may require appropriate test score or completion of basic math, basic English, and/or reading courses with a "C" or better.

**Graduation Requirements**

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

**Transfer Opportunities**

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:

- [Minnesota Transfer](#)
- [Anoka Technical College Transfer Student](#)

**Industry Information**

Anoka Technical College Mechanical Drafting and Design Technology program graduates find employment with manufacturing companies, engineering firms, electro-mechanical companies, and contract firms. Mechanical Drafting and Design Technology graduates have the necessary knowledge and an excellent foundation to begin their careers as mechanical drafters in engineering departments that design and manufacture hard goods products of every description. Most mechanical drafters begin as detail drafters, making the drawings required for the manufacture of products. Mechanical drafters can advance to supervisory positions within the department or may advance to assistant engineers as they gain experience. Other areas of advancement include purchasing and sales.

**Wages/Outlook/Advancement**

Wage information is available from the [Minnesota Department of Employment and Economic Development](#).

**Start Dates**

Fall Semester.....August  
Spring Semester .....January\*\*  
**\*\*Students who start in the spring will need more time to complete this program. Limited first semester technical courses are offered in the Spring semester.**

**Program Sequence**

<b>Fall Semester</b> .....	<b>13</b>
<input type="checkbox"/> MECH 1200 Mechanical CAD I .....	4
<input type="checkbox"/> MECH 1216 Drafting Standards .....	5
<input type="checkbox"/> MECH 2064 Introduction to Inventor .....	4
<b>OR</b>	
<input type="checkbox"/> MECH 2084 Introduction to ProE/Creo .....	4
<b>Spring Semester</b> .....	<b>12</b>
<input type="checkbox"/> MACH 1090 Machining Fundamentals .....	2
<input type="checkbox"/> MECH 1229 Materials and Processes .....	3
<input type="checkbox"/> MECH 2074 Solidworks .....	4
<input type="checkbox"/> MECH 2090 Advanced CAD .....	3

**Faculty Contact**

[Paul Klevann](#)..... 763-576-4188

For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or [EnrollmentServices@anokatech.edu](mailto:EnrollmentServices@anokatech.edu)

**Also see: Mechanical CAD Drafting and Design AAS and Mechanical CAD Drafter diploma**