2018-2019

Machine Technology Certificate 3

Certificate

Total Technical Credits.....16

Program Information

The Anoka Technical College Machine Technology Certificate 3 is a 16-credit program that prepare students for entry-level positions to operate and perform offset changes, as well as basic setups on the following equipment: CNC mills, CNC lathes, coordinate measuring machine and CAD/CAM.

Program graduates are skilled in the areas of blueprint reading, GD&T, statistical process control, lean manufacturing, math, inspection and the correct sequence of operation.

Program Learning Outcomes

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

1. The student will demonstrate machine skills and practices consistent with the manufacturing industry.
2. Exhibit safety principles and practices in a manufacturing environment.
3. Communicate effective use of machine shop theory and process terminology.
4. Work efficiently as a member in a machine shop environment to manage time and meet project deadlines.
5. Work effectively as a member of a team while accepting constructive criticism.

Admission Requirements

Must successfully complete Machine Technology certificate 2.

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: (www.mntransfer.org/students/plan/s_agreements.php?numResults=25&archive=false&from_inst=70&from_prog=&to_inst=&Search=Search)
- Anoka Technical College transfer student (www.anokatech.edu/BecomeStudent/Transfers.aspx)

Industry Information

The machinist is a skilled metal worker who produces metal parts by using machine tools and hand tools. Training and experience enable the machinist to plan and carry through all the operations needed to turn out a finished machine product and to switch readily from one kind of product to another. The machinist's background and knowledge enables him/her to turn a block of metal into an intricate, precise part.

All options are an art as well as a skill, and are considered to be demanding occupations. There is a great variety in the construction of dies and molds, depending on the design of a part, the type of materials used, the ingenuity of the designer, and the knowledge and skill of the die and mold maker, who must machine intricate components of various tooling to tolerances expressed in fractions of one-thousandths of an inch.

Wages/Outlook/Advancement

Wage information is available from the Minnesota Department of Employment and Economic Development (https://mn.gov/deed/job-seekers/job-outlook/).

Wages/Outlook/Advancement

Follow this link for a Gainful Employment Report.

Technical Education: 16 Credits

☐ MACH 2310 CNC Milling 3
☐ MACH 2320 CNC Turning 3
☐ MACH 2331 CAM 1
☐ MACH 2340 CNC Programing II..... 2
☐ MACH 2351 Mold/Die Making Theory..... 3
☐ MACH 2360 Fixture and Tooling..... 4

Also see: CNC Design & Manufacturing Technology AAS, Advanced CNC Machine Technology diploma and Machine Technology certificate 1 and 2

Start Dates

Fall Semester.....August
Spring Semester .....January

Faculty Contact

Jesse Oldenburg 763-576-4065
Brendon Paulson 763-576-4243
Matt Rogers..... 763-576-4088
Jerry Showalter 763-576-4043

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

Sample Program Sequence

Full Time

	First Semester	
1st YEAR	MACH 2310.....3 MACH 2320.....3 MACH 2331.....1 MACH 2340.....2 MACH 2351.....3 MACH 2360.....4 **TOTAL 16**	

ANOKA TECHNICAL COLLEGE
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