

Precision Machining Technology Tech Prep



Program Overview

Did you know that there is a huge shortage of skilled machinists (toolmakers) because people just do not know about the opportunities available in this field? The Dayton area is the nation's fourth largest tooling and machining center, with a huge demand for skilled machinists. The Dayton Tool and Manufacturing Association (DTMA) works very closely with our national award-winning Precision Machining program to help you receive the training necessary for this in-demand career.

What do precision machining workers do? The machinist or metalworker makes parts out of metal and many other materials to produce all of the things we use in our everyday lives. They transform blueprint designs into a finished product. In this program you will study precision machining, paper drawings, AutoCAD, drill presses, power saws, honing machines, vertical and horizontal milling machines, lathes, surface grinding, computer numeric control (CNC) machine programming, CAD/CAM, FeatureCAM and SolidWorks CAD. As part of this program you will have the opportunity to work on a team to design and create your own robot to compete in BOTS-IQ robot battles. This program offers the potential to earn industry standard certifications, and you may be eligible for an Apprenticeship or Advanced Placement position, allowing you to work in this industry while still in school, earning money and real life work experience. Successfully completing two years of this program may make you eligible for college credit and scholarship money to Sinclair Community College.

www.mvctc.com/pm

What would I do in this class?

- Computer Numeric Control (CNC) Machining and Programming
- SolidWorks FeatureCAM
- Computer Aided Machinery
- Precision Measuring Procedures
- Blueprint Reading
- Computer Aided Drafting
- Drill Press and Power Saw Operation
- Vertical and Horizontal Milling Techniques
- Lathe Operation
- Honing Machine Operation
- Surface Grinding
- BOTS-IQ Robots

What can I do when I graduate?

- CNC Programmer or Machinist
- CAD Designer
- Machinist
- Moldmaker
- Tool and Die Maker
- Bench Helper
- Machine Maintenance Specialist
- Special Machine Builder
- Machine Repair Person
- Pattern Maker

What can I do with further training?

- Manufacturing Engineer
- Mechanical Engineer
- Machine Shop Owner/Manager



Advanced Placement



Apprenticeship



Industry Standard Certifications

MIAMI VALLEY
CAREER TECHNOLOGY CENTER

COLLEGE CONNECTION



Sinclair Community College - Credits to be determined

Follow us:



Just click the logos on our home page.

"Students who take our program are able to use their new skills as a stepping stone to many different career choices."

- Mr. Deeter & Mr. Henderson, Instructors

For more information contact your Guidance Counselor or:

Miami Valley Career Technology Center
6800 Hoke Road, Clayton, OH 45315
Toll Free 1.877.766.8282 or 937.854.8056
or www.mvctc.com

SkillsUSA®

Precision Machining Technology Tech Prep

Did You Know?

- Recent MVCTC graduating classes have earned over \$2 million in college scholarships each year.
- Over 60% of MVCTC graduates continue their education at a college, university, or technical school.
- In the 2008 "one year later" follow-up survey, 95% of graduates were enrolled in college, serving in the military, or employed.
- On average, MVCTC serves over 2,900 high school students in the Miami Valley through the main campus, satellite, and Youth Connections programs.
- The average attendance rate for high school students at MVCTC is 95%.
- Every MVCTC student is issued a laptop computer through our Student Notebook Access Program (SN@P).
- Every career program at MVCTC has an Advisory Committee consisting of business and industry leaders in that career area. They meet annually to provide professional guidance and support.
- As part of their career programs, MVCTC students work with several local non-profit service agencies to give back to their communities and improve the quality of life for residents of the Miami Valley (Habitat for Humanity, Ronald McDonald House, Special Olympics, Autism Speaks, etc.).
- MVCTC continues to have students compete at the national level for career technical student organizations (SkillsUSA, BPA, HOSA, FCCLA, FFA, and FEA).
- 2011 marks the 40th year of MVCTC's commitment to helping high school and adult students learn the skills needed to reach their career goals!

Career Passport

Students who successfully complete a career program with good grades, good attendance, and the ability to demonstrate competencies in their career program will receive a portfolio, which will display a profile of both professional and personal accomplishments. This student portfolio or Career Passport complements the high school diploma that is earned while at MVCTC. They receive their high school diplomas from their partner school district.

Early College Connection

MVCTC prepares students for a seamless transition from high school to college by providing several opportunities to earn college credit and scholarship money towards a post-secondary education. Opportunities are offered to students meeting the established criteria for early college options. For more information and to review the eligibility requirements for each, please visit www.mvctc.com/earlycollegeconnections.

Mission Statement

We are dedicated to providing premier educational choices and advanced employment preparation for youth, adults, and organizations of the Miami Valley.

Admissions Timeline

December - Sophomore Visitation Days and Open House.

Early February - Applications are reviewed for students who attend one of MVCTC's 27 partner schools.

Early May - Applications are reviewed from qualified students who live in one of the partner school districts but do not attend one of the 27 partner schools.

Mid-May - If space is available, applications from qualified students who wish to be admitted under MVCTC's open enrollment policy are reviewed for admission.

For more information, visit www.mvctc.com/admissionprocedures.

Visit www.mvctc.com/futurestudents for more information and videos of our programs.

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MVCTC is dedicated to providing equal admission opportunities, equal educational opportunities, and equal employment opportunities without regard to race, religion, color, national origin, ancestry, age, sex, sexual orientation, handicap, marital status, or veteran status.