### Machine **Trades** Program



When most people think about industries that drive the economy and improve quality of life, they often think about the technology and medical device industries. While these are important facets, none of them would exist or thrive without precision Thanks to 3D printing, machining.

NASA can basically 'email'

tools to astronauts

## MACHINE TRADES PROGRAM GENERAL KNOWLEDGE

Course Length 300 Hours

Who Can Enroll
Adults

### Schedule

Tuesday & Thursday 5:30 PM—9:30 PM

Part Time \$7,595.00

Books & Fees \$400.00

Equipment & Clearances \$0.00

Total \$7,995.00

Average Pennsylvania Salary \$21.28 Hour



CNC machining is a manufacturing process in which pre-programmed computer software dictates the movement of factory tools and machinery. The process can be used to control a range of complex machinery, from grinders and lathes to mills and routers. With CNC machining, three-dimensional cutting tasks can be accomplished in a single set of prompts.

### **HELPFUL ATTRIBUTES & ABILITIES**

Tuition, fees, career majors, courses and hours are subject to change without notice.

Know your Feeds and Speeds Mathematical Skills Attention to Detail Fixture and Tooling Problem Solver Be Teachable

### MACHINE TRADES PROGRAM COURSE HIGHLIGHTS





WACTC has a long and storied history of success. The CNC Machining program was developed to meet the demands of local businessmen who continuously have a need for talented craftsman. Their expertise was instrumental in creating the final product.

#### COURSE HIGHLIGHTS

Hands-on experience with CNC Lathes, Grinders and Vertical Milling Machines \* Blueprint Reading \* Computerized and Manual Machining \* Machine Shop Math \* G –Code and CAM Programming \* Machine Tool Safety \* Steel, Aluminum, Brass and Plastic Machining

#### WHAT IS MACHINING

Machining is a process such as abrading, cutting, drilling, forming, grinding, and/or shaping of a piece of metal or other material performed by machine tools such as lathes, power saws, and presses.

#### THE WACTC WAY

We consider our approach to shop environment and machine tool technology a model for the modern machine workshop. It's a clean, well-lit and spacious shop environment, ideal for training.

# MACHINE TRADES PROGRAM FREQUENTLY ASKED QUESTIONS





### Q. How long is the course?

Our evening program is conducted two nights a week, four hours a night. Our 300 hour program runs for approximately 38 weeks. The evening program tends to be a little faster paced than our daytime offering.

### Q. How much does it cost?

WACTC is a non-profit institution, so we really try to keep our costs down. The 300 hour evening selection is \$7,995.00. Financial aid may be available to those who qualify. We have financial experts on staff to assist you in the process.

### Q. Are there job opportunities for me when I'm finished?

The BLS predicted a 10% growth in employment for machinists in general from 2014-2024 due to improvements in technology. The BLS expects ample job opportunities for entry-level machinists since the number of machinists entering the field is projected to be lower than the number of openings. A CNC machinist creates a range of mass-produced items such as tools or machine parts by operating computerized equipment. With the manufacturing boom in our community the Machining graduate finds themselves in high demand.

### MACHINE TRADES PROGRAM FACTS & FIGURES





### COURSE OBJECTIVE:

Students will obtain education and skills that emphasize CNC computerized training in order to place students in modern, high-tech positions. The manual lathe and milling and grinding will also be addressed.

### COURSE DESCRIPTION:

This program provides students with the skills needed for entry into the Machining field through basic, hands-on machining practice on lathes, milling machines and grinders. Topics include set-up, tool selection and methods used on various materials such as steel, aluminum and brass. Computer-part programming and machine operation are also included in the training.

### COURSE TOPICS:

Computerized Machining | Manual Machining | OSHA | Programming Software

### SPECIALIZED SHOP EQUIPMENT:

Computerized Lathes | Computerized Mills | Mastercam Parts Programming Software