Workforce Training Catalog

THADDEUS STEVENS COLLEGE OF TECHNOLOGY

WORKORCE AND ECONOMIC DEVELOPMENT CENTER

TABLE OF CONTENTS

BASIC CNC PROGRAMMING AND SET-UP

Schedule

20 hours total.
5 p.m. – 9 p.m.
Tuesday evenings.

Cost

$950

How to Register

Description

This course will introduce students to the basic operation of a CNC milling machine. Primary emphasis will be on G-code programming, basic work holding techniques, and the Haas CNC control. Students will utilize G-code programming language to set up and machine components on the Haas CNC mill. Understanding mechanical blueprint reading will help the student's success.

Course Learning Outcomes

- Define common G-codes used for CNC milling
- Define safety lines used in G-code programming
- Understand the G-code programming format
- Understand and calculate feeds and speeds used for CNC milling
- Understand and use tool holders and tool changers used for the CNC mill
- Use the multiple machine modes on the Haas CNC control
- Use and set work and tool offsets
- Utilize cutter compensation and canned cycles

TRAIN-THE-TRAINER BASIC CNC PROGRAMMING AND SET UP

Schedule

24 hours total. 3 consecutive days
8 a.m. - 4 pm.

Cost

$975

How to Register

Description

Similar to the Basic CNC Programming course, this course is specifically designed for educators who will guide the next generation of CNC machinists. Students will learn basic operation of a CNC milling machine. Primary emphasis will be on G-code programming, basic work holding techniques, and the Haas CNC control. Students will utilize G-code programming language to set up and machine components on the Haas CNC mill. Understanding mechanical blueprint reading will help the student's success.

Course Learning Outcomes

- Define common G-codes used for CNC milling
- Define safety lines used in G-code programming
- Understand the G-code programming format
- Understand and calculate feeds and speeds used for CNC milling
- Understand and use tool holders and tool changers used for the CNC mill
- Use the multiple machine modes on the Haas CNC control
- Use and set work and tool offsets
- Utilize cutter compensation and canned cycles

HAAS CNC CERTIFICATIONS

Schedule

Email Jared Keim at
keim@stevenscollege.edu
to register for testing.

Cost

Students: **$75** (each certification)

Adults: **$150** (each certification)

Description

Become a HAAS Certified Operator. We now offer hands-on testing for both the HAAS Lathe and HAAS Mill Certifications.

Course Learning Outcomes

- Basic HAAS CNC Lathe and/or Mill Operation
- Proper machine safety
- Fundamental machining processes

More information about HAAS CNC Certification requirements can be found at:

https://www.haascnc.com/

CERTIFICATE IN COLLABORATIVE LEADERSHIP

Schedule

Sept. 10th - Nov. 12th, 2024
or
Feb. 26th - May 5th, 2025.

Cost

$2,497

How to Register

Description

Strengthen the capacity of your team! The Certificate in Collaborative Leadership is a non-credit bearing certificate program brought to you in partnership with Thaddeus Stevens College of Technology's Workforce and Economic Development Center and the Goble Group.

Course Learning Outcomes

- Trust as the foundation for employee retention
- Intergenerational communication and connections
- Emotional intelligence and overcoming adversity
- Coaching and healthy confrontation
- Building a resilient team

This training is covered in six 3-hour sessions, comprised of interactive learning with discussion and insights from fellow participants in a small group setting.

SUPERVISOR CERTIFICATE SERIES

Schedule

Sept. 11th - Oct. 9th, 2024.
8:30 a.m. - 12 p.m.

Cost

(discount for members of **MASCPA**)

Members: **$750**

Non-Members: **$1,050**

How to Register

Location

Thaddeus Stevens College of Technology Greiner Advanced Manufacturing Center

Description

The Supervisor Certificate Program offers broad coverage in the foundational principles of supervision, and the art and science of effective leadership. It addresses core skills in the areas described below. Participants will have the opportunity for peer interaction, practice, and discussion of real-life scenarios.

Topics

- Roles in management
- Communicating clear expectations
- Delegating
- Building trusting relationships through the DISC model
- Providing feedback
- Training/coaching
- Providing recognition
- Resolving conflict while maintaining morale

NO-COST ELECTRICAL SAFETY TRAINING: GENERAL INDUSTRY

Schedule

One-day trainings August 19th, September 20th or October 30th. 8:30 a.m. - 12 p.m.

How to Register

Email Brian Paterniti at bpaterniti@mascpa.org

Location

Thaddeus Stevens College of Technology Greiner Advanced Manufacturing Center

Description

This federally-funded grant training meets OSHA NFP70e requirements.

Topics

- General electrical safety information
- General electrical safe work practices
- Common hazards
- Permitted and non-permitted uses
- Arc flas
- Energy control procedures (ECP's) and Lockout/Tag-out (LOTO)

36-HOUR BASIC ELECTRICAL MAINTENANCE

Schedule

Tuesdays and Thursdays for six weeks. 1 p.m.- 4 p.m.

Cost

$700

How to Register

Location

Tec Centro West, 57 Laurel St., Lancaster PA 17603.

Description

This comprehensive course provides essential training for maintaining and troubleshooting electrical systems. Participants will learn the fundamentals of electrical theory, safe work practices, and the use of diagnostic tools. The curriculum covers key topics such as wiring, circuit breakers, motor controls, and preventive maintenance. Hands-on labs and real-world scenarios ensure practical, applicable skills for maintaining electrical equipment in industrial and commercial settings. Ideal for electricians, maintenance technicians, and those seeking to enhance their technical expertise in electrical maintenance.

Topics

- Intro to electricity
- Electromagnetism
- Power, solving series and parallel circuits, fuses, circuit breakers
- AC electric motors
- Motor performance
- Control cabinet performance
- Ladder logic and electrical prints
- Motor controls, wiring, sensors
- VFD Set-up and programming
- Troubleshooting
- PLC concepts and programming
- Pneumatics and pneumatics programming

60-HOUR BASIC PROGRAMMABLE LOGIC CONTROL(PLC)

Schedule

Mondays and Wednesdays for 10 weeks. 1 p.m.- 4 p.m.

Cost

$1,100

How to Register

Location

Tec Centro West, 57 Laurel St., Lancaster PA 17603.

Description

If you've been wanting to get into industrial automation, this 60-hour PLC training is the perfect starting point. This course covers ladder logic and how to construct basic PLC programs, explaining how PLCs work and their role in controlling industrial automation. You'll gain hands-on experience with various hardware platforms, including Allen Bradley, Automation Direct (Click series), and Open Source PLCs. Additionally, you'll learn to convert a microprocessor into a hands-on PLC using Open Source PLC code, allowing you to take it home and practice writing programs. Ideal for beginners eager to learn the fundamentals of PLCs and industrial automation.

Topics

- PLC Introduction
- Developing PLC programs using Logix Pro (Allen Bradley)
- Interfacing - inputs/outputs
- Open Source PLC programming using a microprocessor (Arduino Uno)
- Click- Automation Direct
- Soldering

Workforce & Economic Development Center

Thaddeus Stevens College of Technology
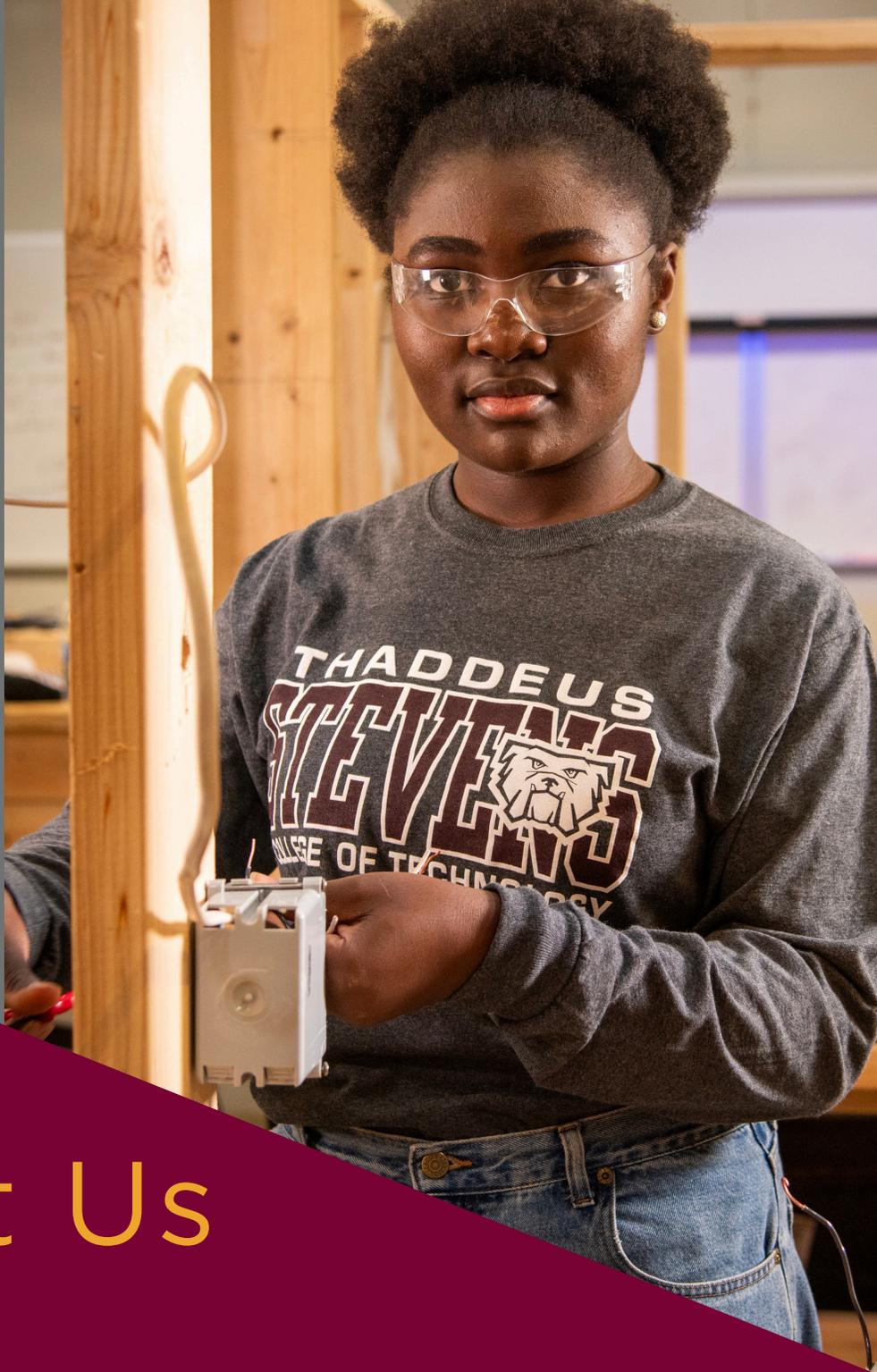
Contact Us

Valerie Hatfield
Workforce & Economic
Development Center Director
hatfield@stevenscollege.edu

Amy Welsh
Workforce
Development Manager
welsh@stevenscollege.edu