



Workforce & Economic  
Development Center

Thaddeus Stevens College of Technology

# Workforce Training Catalog

THADDEUS STEVENS COLLEGE OF TECHNOLOGY

WORKFORCE AND ECONOMIC DEVELOPMENT  
CENTER

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# BASIC CNC PROGRAMMING AND SET-UP

## Schedule

20 hours total  
Class schedules vary. Inquire  
for next class schedule

## 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
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# HAAS CNC CERTIFICATIONS

## Schedule

Email Jared Keim at [keim@stevenscollege.edu](mailto: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/>

# SUPERVISOR CERTIFICATE SERIES

## Schedule

5 Consecutive Wednesday's  
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](mailto: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

# APP DEVELOPMENT WITH FLUTTER

## Schedule

Tuesdays/Thursdays 5pm-9pm  
for 15 weeks

## Cost

**\$940**

## How to Register



## Location

TSCT Griscom Education  
Center, 1100 E. Orange St.  
Lancaster PA 17602

## Description

In this 60-hour course, you will learn to build beautiful and high-performance mobile applications with Flutter! This course covers everything that you need to know to build an app, from the basics of Dart Programming to advanced Flutter concepts. You'll master UI design, state management, and integrating backend services while working on real-world projects. Perfect for both beginners and experienced developers looking to enhance their skills in cross-platform development which enables you to build apps for both Android and Iphone.

## Topics

- Introduction to Flutter
- Dart Programming Language
- Flutter Fundamentals
- State Management
- Navigation and Routing
- Working with API's
- Flutter and Firebase
- Advanced Flutter Concepts
- Testing and Debugging
- Publishing and Beyond

# SOFTWARE AUTOMATION TESTER

## Schedule

Mondays, Wednesdays and  
Fridays 5pm-9pm

## Cost

**\$1,470**

## How to Register



## Location

TSCT Griscom Education  
Center, 1100 E. Orange St.  
Lancaster PA 17602

## Description

In this 100-hour comprehensive course, you will master the art of software automation testing. Learn to design and implement automated test scripts using popular tools like Selenium, JUnit, and TestNG. The course covers test automation frameworks, continuous integration, and best practices to ensure robust and efficient testing processes. Ideal for quality assurance professionals and developers aiming to enhance their testing skills and ensure high-quality software delivery.

## Topics

- Software Development Life Cycle
- Software Testing
- Software Development Methodology
- Programming
- Object Oriented Programming System
- Automation Testing

# Workforce & Economic Development Center

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# Contact Us

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