Plastics Processing Technicians (PPTs) are critical to production efficiency.

PPT is a three-year apprenticeship that develops machine operators into valued technicians. Upon completion, apprentices will be able to safely and efficiently start up, changeover, monitor and troubleshoot a given process. The robust program also includes business skill development, including communication and teamwork modules to help apprentices become well-rounded employees.

Program Features:
- Delivers process-specific training
- Trains workers in any location via the iris platform
- Comprehensive three-year registered program
- Apprentices can apply for advanced credit towards a Penn College degree

Penn College’s apprenticeship program trains workers to:

- Identify that material properties are in spec
- Develop a clear processing window for each product
- Process data to improve efficiency
- Methodically troubleshoot problems
- Perform product checks to ensure quality
- Operate auxiliary equipment
PLASTICS INDUSTRY ESSENTIALS

Extrusion & Injection Molding
- Workplace Safety
- Building Interpersonal Communication Skills
- Plastics Materials
- Mechanical & Physical Properties
- Polymer Structures
- Math for Quality

Extrusion Only
- Extrusion Fundamentals

Injection Molding Only
- Introduction to Fluid Systems
- Major Components of an Injection Molder
- Proper Processing Conditions

EXTRUSION – LEVEL 1
- Extrusion Equipment & Process
- Processing Conditions
- Behavior Inside the Extruder
- Introduction to Hydraulic & Pneumatic Components
- Twin-Screw Equipment, Design & Applications
- Coextrusion Applications

EXTRUSION – LEVEL 2
- Troubleshooting – Five-Step Problem Solving
- Mechanical Troubleshooting
- Granulators, Chillers & Heaters, and Screw Cleaning
- Screen Changers & Gear Pumps
- Inspection & Auditing
- Statistical Process Control
- Continuous Improvement

INJECTION MOLDING – LEVEL 1
- Equipment Components & Tools
- Function of the Injection Unit
- Injection Molding Screws
- Clamping Systems
- Processing Conditions
- Introduction to Electricity
- Mold Cooling
- Preventative Maintenance Schedules
- Setting Up a Cycle
- Decoupled Molding

INJECTION MOLDING – LEVEL 2
- Co-Injection, Insert Molding
- Rubber Injection Molding
- Five-Step Problem Solving
- Mechanical Troubleshooting
- Inspection & Auditing
- Statistical Process Control
- Continuous Improvement

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Penn College operates on a nondiscriminatory basis.

Penn College is approved by the US Department of Labor and the PA Department of Labor & Industry as a sponsor of apprenticeship programs.