



Wellsboro Area School District

Advanced Manufacturing Pre-Apprenticeship

Agreement for Training Services

Proposal Date:
12-04-2023

Submitted to:

Amy Coots
Principal of Academic Affairs
570-724-4424

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Submitted by:

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**Pennsylvania
College of Technology**
A Penn State Affiliate

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Pennsylvania College of Technology has a long history of addressing skills gaps through customized contract and consortia-based training solutions, and public workshops.

Workforce Development extends the resources of Pennsylvania College of Technology to organizations and individuals across Pennsylvania, nationally, and internationally.

Specialties include Apprenticeships, Business and Leadership, Industrial and Plastics, Healthcare, Computer, and Energy.

Introduction

Workforce Development at Pennsylvania College of Technology (hereafter referred to as College) agrees to provide services as outlined in this Agreement for Wellsboro Area School District (hereafter referred to as Client).

Training Description

Using a combination of self-guided online modules and instructor-led labs augmented, when possible, by a curriculum delivered by the Client, College will provide training aligned to standards developed by the Society of Manufacturing Engineers and approved by the State of Pennsylvania for the College's Advanced Manufacturing Pre-Apprenticeship Program.

Objectives

This program is designed to introduce the foundational concepts of advanced manufacturing. Pre-Apprentices will receive instruction in the competencies required to attain a Certified Manufacturing Associate (CMfgA) certification. Pre-Apprentices will also be provided networking opportunities with companies engaged in apprenticeship programs.

Program Outline

Certified Manufacturing Associate Body of Knowledge - *See Appendix B*

Instructional and Lab Days:

- 1 Day – Program Orientation (Virtual)
- 3 Days – Lab days reinforcing key concepts (In Person)
- 2 Days per Month - Instructional Sessions (Virtual)
- 1 Day – CMfgA Review and final assessment (Virtual)
- 1 Day – “Industry Day” Career Fair (In Person)

Client Responsibilities

- Identify a single point of contact
- Recruit and register student participants
- Assure adherence to the recommended schedule of learning and activities
- Provide transportation to/from Penn College for on-campus days
- Provide an adult chaperone for on-campus days
- Additional program responsibilities see Appendix A – AMP Guidelines for Engagement

Program Information

Date(s)	January 19, 2024 to May 10, 2024
Schedule	Program Length: Approx 4 Months Lab and Instructional Class Schedule - TBD
Registration	Registration closes: January 12, 2024 Schools may register any number of students up to 20.
Location	Location for on-site activities: Pennsylvania College of Technology Center for Business and Workforce Development 1127 W. Fourth Street Williamsport, PA Additional sites for lab sessions may be identified depending on the size of the participant cohort.

Pricing

Grant funds provided by the PA Department of Community and Economic Development (DCED) have been awarded to Pennsylvania College of Technology Workforce Development for the development, marketing, materials, delivery, and general administration of the Advanced Manufacturing Pre-apprenticeship Program.

While these funds are available, there is no cost to the partner school for students to participate in the AMP program for the 2023-24 program year. The cohort size is limited to 45 pre-apprentices.

Travel: Grant funds are available to reimburse schools for transportation to onsite activities such as lab sessions and Industry Day.

Invoices should be mailed to:

Pennsylvania College of Technology
Workforce Development, Department #29
One College Avenue
Williamsport, PA 17701
Attention: Rebecca Freezer

Guidelines for Participation

See Appendix A

Terms

Responsibility. The College will provide the Client with a quality instructor and educational services designed to match the requirements of the activity. Overall coordination of the service outlined will be the joint responsibility of the Client and the College. Client agrees that all accessibility needs will be disclosed to College for consideration upon registration of students.

Cancellation Policy. Client may cancel a reservation of a seat up to the start of the program: 1/12/2024. Client may withdraw a student from the program after the start of the program at no financial penalty to the Client.

Intellectual Property Rights. Copyright and intellectual property rights in materials produced or developed by the College in the performance of this Agreement shall be owned by the College. The Client shall be deemed to possess an implied license for use of these rights solely for the purposes of this Agreement.

Indemnification. Each Party agrees to indemnify and hold harmless the other Party and its officers, directors, and employees from and against any and all damages, liabilities, obligations, losses, deficiency actions, costs (including reasonable attorney’s fees and costs), demands, suits, judgments, or assessments arising out of the performance of this Agreement.

Entire Agreement, Amendment, and Acceptance. This document constitutes the entire Agreement between the parties and supersedes any prior oral or written discussions, negotiations, or agreements pertaining to the services described herein. Any changes or modifications to this Agreement must be in writing and executed by authorized agents of the College and Client to ensure they are addressed by the College.

Signatures. Signatures, as provided below, constitute acceptance of all terms and conditions as stated herein.

PENNSYLVANIA COLLEGE OF TECHNOLOGY

Signed By _____

Date _____

Shannon Munro
Vice President, Workforce Development
570-327-4775
smm20@pct.edu

WELLSBORO AREA SCHOOL DISTRICT

Signed By _____

Date _____

Alanna R. Huck
Superintendent
570-724-0302
ahuck@wellsborosd.org

Please sign and return. A fully executed Agreement will be sent to you for your records.

Appendix A

Guidelines for Engagement

Point of Contact: Partner school will identify a single point of contact (POC) who will manage any administrative processes and procedures at the partner site and communicate with parents and students on behalf the Penn College Advanced Manufacturing Pre-apprenticeship Program.

Should the point of contact leave his/her position (either temporarily or permanently), the partner school will identify a new point of contact and notify Penn College Workforce Development.

Student Accommodations: Students with documented educational needs will be provided reasonable accommodations during assessment and online learning. Partner schools may provide those accommodations in compliance with a student I.E.P. Accommodations needed while the student participates in program activities on campus may be arranged through the Penn College Office of Disability Services.

On-Campus Visits:

Transportation: Partner school will arrange, provide and absorb the cost of transportation for students attending Penn College - or other designated facilities - for on-campus days throughout the program.

Chaperones: Partner school will provide an adult chaperone to accompany students to on-campus activities connected with this program. Chaperones are expected to stay with students at all times throughout the visit to campus- or other designated facilities.

Student Behavior: Pre-apprenticeship participants are expected to maintain a code of conduct in alignment with both their home school policy, as well as that of Pennsylvania College of Technology while participating in program activities on-campus or at other designated facilities.

Program Promotion: Partner school will include the program description for the Advanced Manufacturing Pre-apprenticeship Program in student scheduling materials and identify the Program as being provided through Pennsylvania College of Technology.

Program Orientation:

Student Onboarding and Orientation: Penn College Workforce Development will provide onboarding materials, including appropriate release forms to students officially registered in the AMP Program. Students will be required to participate in an orientation session on the first day of the program that includes program overview, expectations, and training on online learning tool (Tooling U).

Point of Contact/Teacher Orientation: Penn College Workforce Development will provide an orientation session to partner schools' point of contact and/or teacher of record for the AMP Program including program overview, expectations, and training on the online learning management system (Tooling U).

Student Assessment: Student pre-apprentices in the AMP program will be eligible take the credential assessment for the Certified Manufacturing Associate under the following conditions:

- 1) The pre-apprentice has completed all Tooling U modules with evidence of sufficient competency, and
- 2) The pre-apprentice has participated in at least one in-person lab session.

Student Withdrawal from AMP Program: A student may withdraw from the AMP program without penalty to the partner school. Efforts should be made to counsel the student on his/her reason for withdrawal. The partner school point of contact should notify Penn College Workforce Development of any student withdrawals.

Partner schools may not substitute a student in the AMP program without notifying Penn College Workforce Development.

Student Eligibility: Due to the technical nature of the coursework, it is recommended that selected students have completed Algebra I and attained at least a 9th-grade reading level. Partner schools may add eligibility requirements for the pre-apprenticeship program separate from these recommended qualifications.

Program Attendance: Pre-apprenticeship participants (students) are strongly encouraged to attend ALL on-campus – or other designated location - activities, as these are planned to enhance the student’s exploration of the manufacturing industry and increase their success in earning the industry credential. Partner school’s point of contact should report any excused absence of a pre-apprenticeship participant to Penn College Workforce Development staff on the day of the absence.

FERPA

As part of the pre-apprenticeship partnership, Penn College Workforce Development and partner schools may share education records of students enrolled in the Program to fulfill the underlying purposes of this program and in compliance with the requirements of the Family Educational Rights and Privacy Act (FERPA).

Such FERPA compliance shall include, but not be limited to

- Appropriate notifications to the students and/or their parents that education records are being shared in compliance with 34 C.F. R. § 99.34; and
- Penn College and partner schools are not disclosing any education records either receives from each other to a third party without complying with 35 C.F.R. § 99.33.



**CERTIFIED MANUFACTURING
ASSOCIATE
BODY OF KNOWLEDGE**



sme.org/cmfga

MANUFACTURING ASSOCIATE BODY OF KNOWLEDGE 2020

Topics	Competency
1. Shop Essentials (Applied Mathematics)	
1.1 Mathematics	Understand & Apply
1.1.1 Perform calculations involving addition	
1.1.2 Perform calculations involving subtraction	
1.1.3 Perform calculations involving multiplication	
1.1.4 Perform calculations involving division	
1.2 System of Measurement	Understand & Apply
1.2.1 Perform calculations involving common English units	
1.2.1 Perform calculations involving metric units	
1.2.2 Perform conversions between the two systems	
1.3 Fractions and Decimals	Understand & Apply
1.3.1 Perform calculations involving fractions	
1.3.2 Perform calculations involving decimals	
1.3.3 Perform conversions between the two types	
2. Safety	
2.1 Safely assembling components	Remember & Understand
2.1.1 Describe best practices for safely assembling components	
2.1.2 Describe proper ergonomics and use of personal protective equipment	
2.2 Intro to OSHA	Remember & Understand
2.2.1 A basic awareness of standards, rights, and responsibilities for workplace safety and keeping the workplace legally compliant	
2.3 OSHA Regulations (PPE)	Remember & Understand
2.3.1 Regulations for personal protective equipment (PPE)	
2.3.2 Impact on day-to-day operations in the workplace	

MANUFACTURING ASSOCIATE BODY OF KNOWLEDGE 2020

2.4 OSHA Regulations (Lockout/Tagout)	Remember & Understand
2.4.1 Describe OSHA regulations regarding lockout/tagout procedures	
2.4.2 Describe OSHA regulations regarding energy isolation	
2.4.3 Describe the impact on day-to-day operations in the workplace	
2.5 OSHA Regulations (Hazardous Materials)	Remember & Understand
2.5.1 Describe OSHA regulations regarding hazardous materials	
2.5.2 Describe Safety Data Sheets (SDS) and how they impact day-to-day operations in the workplace	
2.6 Fires and Safety	Remember & Understand
2.6.1 Describe OSHA regulations regarding fire safety and how they impact day-to-day operations in the workplace	
2.7 Bloodborne Pathogens	Remember & Understand Understand & Apply
2.7.1 Describe OSHA regulations regarding bloodborne pathogens and how they impact day-to-day operations in the workplace	
2.8 Hand and Power Tools	Remember & Understand
2.8.1 Describe the safe use of hand and power tools used on the job	
3. Quality	
3.1 Quality Overview	Remember & Understand
3.1.1 Describe the importance of quality throughout different departments of an organization	
3.1.2 Describe the use of different quality management systems and tools in manufacturing processes and products	
4. Lean	
4.1 5S Principles (Sort, Set in Order, Sweep, Standardize, Sustain)	Remember & Understand
4.1.1 Restate terms associated with 5S principles	
4.1.2 Restate examples for each term specific to the person's working environment	

MANUFACTURING ASSOCIATE BODY OF KNOWLEDGE 2020

4.2 Lean Manufacturing Overview	Remember & Understand
4.2.1 Understand the principles and terminology of lean	
4.2.2 Describe the seven forms of waste, value-added, push and pull systems, and the importance of continuous improvement	
5. Inspection	
5.1 Inspection Instruments and Gages	Remember & Understand
5.1.1 Describe the use and care of common inspection instruments and gages used in the shop	
5.2 Part Tolerancing	Remember & Understand
5.2.1 Describe common methods used for part tolerancing	
5.2.2 Describe the impact that tolerances have on part production and quality	
5.3 Assembly Print	Remember & Understand
5.3.1 Read an assembly print with an exploded view describe how key assemblies of the component are joined	
5.4 Troubleshooting	Remember & Understand
5.4.1 Understand various methods and tools used to troubleshoot problems	
5.4.2 Describe tools that are used to collect and interpret data including check sheets, fishbone diagrams, and Pareto charts	
5.4.3 Understand the 5 Why technique, brainstorming, documentation, and troubleshooting teams which are common methods of gathering troubleshooting data	
6. Fasteners	
6.1 Identify common assembly and late-stage processes that take place in industrial facilities	Remember & Understand
6.2 Assembling Components	Remember & Understand
6.2.1 Describe best practices for safely assembling components, including proper ergonomics and use of personal protective equipment	

MANUFACTURING ASSOCIATE BODY OF KNOWLEDGE 2020

6.3 Tools for threaded fasteners	Remember & Understand
6.3.1 Identify different types of tools used with threaded fasteners	
6.3.2 Identify the advantages and disadvantages of the different types of tools	
6.3.3 Identify factors that go into selecting a tool for a threaded fastener application	
7. CNC	
7.1 CNC machine tools and controls	Remember & Understand
7.1.1 Describe common components of CNC machine tools and controls	
8. Robotics	
8.1 Industrial robots	Remember & Understand
8.1.1 Describe the basics of industrial robotics, including types, applications, and programming methods and safety protocols.	
8.1.2 Identify different ways to prevent robot accidents	
8.1.3 Describe the different kinds of safeguarding systems that protect employees from injury when working with robots	
9. Additive Manufacturing	
9.1 Overview of AM	Remember & Understand
9.1.1 Identify the basic steps, methods, processes, and materials	
9.1.2 Identify the advantages and disadvantages of AM	
9.1.3 Identify uses of AM	