NORTHERN PENNSYLVANIA REGIONAL COLLEGE

Industrial Maintenance Micro-Credential

Safety, Communication, and Professional Development in Manufacturing Total Time: 16 hours Cost: Pricing begins at $3,000.00* This course's focus is to give participants an understanding of the principles of industrial safety. **Program Goals** Upon successful completion of this program, students will be able to: • Demonstrate knowledge of a safe working environment • Demonstrate knowledge about safety compliance concerns • Become OSHA 10 certified	**Basic Industrial Math** Total Time: 16 hours Cost: Pricing begins at $3,000.00 The focus of this course is to review the math operations and concepts commonly used on the job in the production environment. **Program Goals** Upon successful completion of this program, students will successfully be able to: • Learn basic math operations involving whole numbers, fractions, and decimals, ratios, proportions, percentage, powers and roots • Learn basic geometry involving dimensions, 4 building blocks, endpoints, rays, line segments, and angles	**Hydraulics/Pneumatics** Total Time: 24 hours Cost: Pricing begins at $4,500.00 The focus of this course is to help learners understand the safe operation and function of hydraulic and pneumatic systems. **Program Goals** Upon successful completion of this program, students will successfully be able to: • Understand the elements of fluid power systems such as pressures, flows, maintenance, oils, and filters • Understand the theory of operation in common fluid power components • Practice safe diagnostics and troubleshooting methods

AC/DC Electric	**Problem Solving and Root Cause Analysis**	**PLC Maintenance**
Total Time: 24 hours Cost: Pricing begins at $4,500.00 The focus of the course is to help learners understand the fundamentals of AC/DC electrical systems used for power and control in industrial electrical technology. **Program Goals** Upon successful completion of this program, students will successfully be able to: • Learn industry-relevant skills in basic electrical and electronic control circuits, electrical measurement, circuit analysis, inductance and capacitance, combination circuits, transformers, electronic sensors, and an introduction to electric relay control.	Total Time: 24 hours Cost: Pricing begins at $4,500.00 This course focuses on teaching concepts diagnostic and troubleshooting practices in safe, effective, and time-saving methods. **Program Goals** Upon successful completion of this program, students will successfully be able to: • Using a seven-step process to effectively learn diagnostic techniques to repair equipment, pinpoint problems, and safely troubleshoot concerns in electrical, electronic, and fluid power equipment	Total Time: 24 hours Cost: Pricing begins at $4,500.00 This course introduces the concepts of needed skills in programming, operation of modern PLC systems that use HMI panels, networking, and a variety of basic program commands **Program Goals** Upon successful completion of this program, students will successfully be able to: • Students will gain exposure to basic HMI panel operations, PLC program methods and control methods for timers, sequencing, counter instructions and control applications

*The cost of each course has a base price listed (1-15 students). Additional costs of travel and time may be added to the final price.