Certified Production Technician 4.0

Earn College Credit — Develop Job-Ready Skills
Achieve National Certification
**Certified Production Technician 4.0 Program**

### Manufacturing Processes & Production
- Industry 4.0 Technologies
- Advanced Manufacturing Materials & Process
- Mechanical Power & Basic Mechanical Elements
- Hand Tools
- CNC Programming & Operation
- Automated System Operations
- Machine Adjustments & Troubleshooting
- Production Planning & Workflow
- Lean Manufacturing
- Material Quality Control

### Maintenance Awareness
- Total Productive Maintenance (TPM)
- Mechanical Power Transmission
- Gear, Belt, & Chain Drives
- Pneumatics & Hydraulics
- Basic Electrical Circuits
- Electrical Control & Circuits
- Electrical Resistance Measurement
- Automation Sequence Circuits
- PLC Operation, Programming, & Motor Control
- Welding

### Quality Practices & Measurement
- Introduction To Advanced Manufacturing
- Industry 4.0 & IIoT
- Types of PPE
- Hazardous Material Handling & Storage
- Machine, Equipment, & Robot Safety
- Safety Inspections & Analysis
- Fire & Electrical Safety
- Emergency & Accident Response
- Communication Methods & Feedback
- Production Team Communication

### Safety
- Dimensional Measurement & Tolerancing
- Measurement Conversion
- MultiView Drawings
- Blueprint Dimensions & Notes
- Manufacturing Drawings & Scales
- Welding Symbols
- Micrometer, Caliper, & Micrometer Measurement
- Quality Inspections & Audits
- Basic Statistical Concepts
- Introduction To Control Charts

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**Engage... Ignite a Passion for Achievement**

In today’s technology-driven society, capturing the attention of high school students can be daunting. Active engagement in learning provides students with the necessary skills to competently meet the challenges in today’s workplace. Regardless of career path, high schools must prepare students who can engage in their work, effectively work with others, identify and solve problems, and continue to acquire the necessary skills to succeed in their work roles.

The Certified Production Technician 4.0 program enables students to build this foundation. The program’s interactive multimedia curriculum uses a competency-based instructional design that teaches MSSC’s nationally recognized standards. An engaging combination of video, text, audio, 3D animation and interactive activities, the CPT 4.0 curriculum captures the attention of the student and keeps them engaged through the entire learning process – igniting their passion for achievement.

**Develop... Employer Preferred, Job-Ready Skills**

Advanced Manufacturing offers some of the highest-paying and most satisfying career opportunities available today. High School students heading towards a career in manufacturing must demonstrate a broad array of critical technical skills. The MSSC CPT 4.0 Program provides training and credentialing in the foundational areas of safety, quality, manufacturing processes and maintenance.

In addition to technical skills, CPT addresses cross-functional skills, such as communication, teamwork, customer service and workplace conduct. CPT is the foundation of the NAM-Endorsed Skills Certification System, making it a truly portable credential.

**Earn... Get a Head Start, Earn College Credit**

High school students achieving the CPT 4.0 certification will have a distinct academic advantage over other college-bound students. Students focusing on engineering, manufacturing, energy, science and a host of other career paths must be able to demonstrate their technical knowledge.

CPT develops strong STEM (Science, Technology, Engineering, Mathematics) skills as a natural part of learning technical skills. Students also learn essential academic skills, such as writing, listening, problem-solving, decision-making and analyzing information. Today, many schools have established college articulation for the program for up to six credit hours.

**Achieve... Certification is the Path to Success**

Increasingly, manufacturers are looking to national organizations to identify, develop, and establish skill standards. These standards offer students the opportunity to demonstrate that they have acquired the necessary skills for the technologically intensive jobs of the 21st century. MSSC’s CPT 4.0 Program puts students on the path to success:

- Industry recognizes and prefers the CPT certifications
- Creates portable record of achievement
- Improves prospects for hiring, advancement and benefits
- Demonstrates students are able to keep pace with technological changes
The Manufacturing Skill Standard Council (MSSC) is an industry-led, standards-based, training, assessment and certification system focused on the core skills and knowledge needed by the nation’s production and supply chain logistics workers. The nationwide MSSC system, based upon industry-defined and federally-endorsed national standards, offers both entry-level and incumbent workers the opportunity to demonstrate that they have acquired the skills increasingly needed in the high-growth, technology-intensive jobs of the 21st century.

**Amatrol’s CPT 4.0 Program includes:**

- 25 Seats For Each Certification Area
- 96 Self-Paced Learning Units
- 87 Skills, 140+ Hours of Learning

**Enrich your CPT 4.0 Program with these options:**

**Instructor Training**

Your “success” is our success. MSSC puts that philosophy into action by offering an intensive, three-day course designed to prepare instructors to deliver CPT Curriculum.

**Amatrol Learning Systems**

Amatrol’s trainers provide students a unique way to combine hands-on skills with strong curriculum for an outstanding learning experience.

**CPT 4.0 + Skill Boss**

Amatrol’s Skill Boss offers performance-based assessment for evaluating skill levels & competencies of future machine operators in today’s modern manufacturing production areas.