

Benefits of Certification

Robotics Technicians:

- Provides documented verification of proven skill sets
- A nationally portable, robotics industry recognized certification
- Stacks on the MSSC Certified Production Technician nationally recognized manufacturing skill set
- Higher potential for career advancement through enhanced robotics and manufacturing skill sets

Robotics Manufacturers:

- Provides a national technician skill benchmark for the robotics and unmanned systems industry
- Reduces in house training costs for new employees
- Simplifies the employee recruitment process reducing time to locate candidates and cost to hire
- Provides a training path for incumbent workers to advance skills

Robotics Educators:

- Assists in serving local industry with programs to educate potential technicians
- Increases student enrollment through use of certification preparation training
- Programs available on-line for optimal student learning solutions

How to become Certified

NRTC awards the “**Certified Robotics Production Technician**” certification to candidates who have successfully passed all three of the NRTC modular assessments **and** have received the MSSC “**Certified Production Technician**” certification. Module certificates are awarded after successfully passing each of the modular assessments.

The credentials include:

- A certificate for each successfully passed assessment
- A large “Certified Robotics Production Technician” Certificate suitable for framing for each candidate passing all five of the modular assessments

Visit NRTCcenter.com and click on the “Certification” tab to register for your first assessment!

Please note: NRTC assessments are rigorous and it is highly recommended that all candidates take the NRTC courses as preparation for the assessments. However, there is no formal requirement for training or experience to qualify for the assessments.



Contact Us

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Certified Robotics Production Technician

Are You Certified?

For information on certification, please contact the NRTC Office at 843-413-2756 or e-mail Dorothy.Czarnocki@nrtcenter.com

www.nrtcenter.com

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Certified Robotics Production Technician Program

The NRTC “Certified Robotics Production Technician” (CRPT) credential provides candidates the opportunity to demonstrate they have achieved the skill level needed by today’s unmanned and intelligent systems manufacturers. Production technicians in this high tech environment require both production and robotics skill sets to be successful. NRTC has focused on several core competencies in robotics technologies as well as partnering with MSSC who provides credentialing for the production core competencies by offering the “Certified Production Technician” (CPT) credential. The NRTC Certification program offers a new tool to the unmanned and intelligent systems industry to locate technically skilled, flexible, trainable production technicians with a known and verified skill level.

Partnering with The Manufacturing Skill Standards Council

The Manufacturing Skill Standards 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 technicians. The MSSC System awards “Certified Production Technician (CPT)” certificates to individu-



als who pass any or all of its four Production modules: Safety; Quality Practices & Measurement; Manufacturing Processes & Production; and Maintenance Awareness.

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.

Certified Robotics Production Technician

Computer Operating Systems

- Knowledge of the functions performed by microprocessors, logic and memory devices and I/O devices
- Understanding of how computer operating systems process data and the functions of the subsystems of a micro processor

Computer Control Systems

- Understanding the operation of robotic controllers
- Knowledge of electronic devices that control robotic arm movement

Power Systems

- Understanding battery technology, load testing and life determination
- AC/DC generation and conversion, variable voltage and phase modulation

Sensors

- Understanding sensor types and functions
- Knowledge of source materials being detected such as radiation and biochemical agents

Communication Systems

- Understanding system components such as source, encoder, transmitter, receiver, decoder, storage, retrieval, and destination

- Converting and understanding digital communications

Cameras, Photonics and Light Sources

- Knowledge of photonic devices used in robotics and digital camera and transmission types
- Knowledge of proper safety and handling of camera sensor and laser devices

Robot Mobility and Navigation

- Knowledge of navigation systems and ranging
- Understanding of the Global Positioning System (GPS) and its major communication protocols

Introduction to Lean Manufacturing

- Knowledge of traditional and lean manufacturing systems
- Knowledge of the different types of waste, different key measures and the lean strategies

Safety

- Perform inspections and emergency drills
- Identify unsafe conditions and take corrective action

Quality Practices and Measurement

- Participate in internal quality audit activities
- Inspect materials, products and processes at all stages of production and communicate quality problems

Manufacturing Processes and Production

- Identify customer needs, determine resource availability, make job assignments
- Coordinate workflow with team members and support groups

Maintenance Awareness

- Perform housekeeping, preventative maintenance and repair
- Recognize potential maintenance issues in production systems; know when to notify maintenance personnel