



# Advanced Manufacturing and Production Technology

**Short Description:** This program offers a broad technical foundation of knowledge and skills to prepare students for employment in Automation and Production positions. Study of automation technology, its application in manufacturing, engineering and robotics, fiber optics, co-bots (collaborative robots), electrical controls, machine language, drones, animatronics, programming safety, training in programmable logic controller, basic CNC design, milling, woodworking, plasma cutting, LASERS, pneumatics, hydraulics, basic electrical, CAD, project management, persistence of vision (optical illusion)

**Program Content:** This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the manufacturing career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the manufacturing career cluster. This program offers a broad foundation of knowledge and skills to prepare students for employment in Advanced Manufacturing and Production positions.

The content includes but is not limited to providing students with a foundation of knowledge and technically oriented experiences in the study of automation technology, its application in manufacturing, engineering and robotics, and its effect upon our lives and the choosing of an occupation. The content and activities will also include the study of enterprise systems, safety, quality, and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry.

**Admissions:**

1. Apply to MTC at <https://manateetech.edu/apply-now/>. Submit your application to access you "To Do List." You are not accepted into the program after applying, you must complete your do list.
2. Complete your "To-Do List" at <https://www.MTCdashboard.net>

Note: The Basic Skills Assessment must be taken within 6 weeks of you admit date unless exemption criteria have been documented per State Statute. For exemption information, see the Student Handbook located here: <https://www.manateetech.edu/quick-docs/>

**Length of Program:** Full-time 600 hours – approximately 6 months full-time to complete.

<b>OCP</b>	<b>COURSE</b>	<b>HOURS</b>
A	Entry-Level Production Worker – ETI0040	150
B	Production Quality and Assurance – ETI0431	150
C	Manufacturing and Production Processes – ETI0432	150
D	Manufacturing and Production Maintenance – ETI0453	150

**Dual Enrollment:** Yes

**Certification/Licensure:** SolidWorks Professional

**CTSO:** SkillsUSA and/or HOSA are the approved cocurricular career and technical student organizations which provide activities for students as an integral part of the instruction by providing leadership training and reinforcing specific career and technical skills.

**Articulation:** May be available towards credits at Florida public colleges/universities. Speak with a Career Counselor for more information.

**Location:** MTC Main Campus, 6305 State Road 70 East, Bradenton, FL 34203. Tel. 941.751.7900

<b>Program #J100200</b>		<b>CIP# 0615040606</b>
Estimated Tuition, Lab, and Fees <i>(includes \$60.00 administrative fee)</i>		\$2,749.00
<b>Additional Fees Due Prior to Admittance</b>		
Application Fee		\$45.00
<b>Bookstore</b>		
Uniform*		\$28.00
<b>Estimated Total Cost of Program</b>		<b>\$2,822.00</b>

**Start Date:** August, January

**Start Time:** Monday - Friday, 8:00 a.m. – 3:00 p.m.

**For More Information:** Scan QR CODE at the bottom of document.

***Financial aid available depending on student's eligibility.***

\*Uniforms may be covered, for Pell eligible students once aid has been applied to all tuition & fee charges. All pre-admission fees are non-refundable and not covered by Financial Aid. \*Prices are subject to change. Annual fees (charged each academic year from July 1—June 30).  
Textbook estimate. Current book list and prices: <https://manateetech.edu/current-students/bookstore/>  
Tuition is \$2.92 per hour for Florida residents. Tuition is \$11.71 per hour for non-Florida residents.

<https://www.manateetech.edu/admissions/financial-aid/>



**941.751.7900**

**ManateeTech.edu**