

# Mechatronics Technology

**Short Description:** The program is a multidisciplinary field of engineering designed to provide graduates with a high-tech skill set and knowledge in electronic, mechanical, fluid power/pneumatic systems, electrical, Program Logic Controller applications (PLC) programming, automated machines, and robotic systems. The content includes Direct current (DC) circuits, alternating current (AC) circuits and analog circuits; solid state and digital devices; microprocessors; use of gears, drives, linkage and lever systems, circuit diagrams, blueprints, schematics; chassis assembly techniques; laboratory practices, system design and trouble shooting.

**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.

**Mechatronics** is the combination of Mechanical, Electronic, Computer, Software, Control, and Systems Design engineering to design and manufacture useful products. Mechatronics is a multidisciplinary field of engineering,

The program is designed to provide graduates with a high-tech skill set and knowledge in electronic, mechanical, fluid power/pneumatic systems, electrical, Program Logic Controller applications (PLC) programming, computer technology for maintenance and repair of PLC / computer controlled, automated machines and robotic systems.

The content includes but is not limited to Direct current (DC) circuits, alternating current (AC) circuits and analog circuits; solid state and digital devices; microprocessors; use of circuit diagrams, blueprints, and schematics; soldering and chassis assembly techniques; laboratory practices, technical recording, and reporting. The operation, maintenance and repair of electrical equipment and control systems, hydraulic/pneumatic systems, and mechanical systems: gears, drives, linkage and lever systems, computers, Programmable Logic Controller (PLC) programming, process control systems, automated control, and integrated robotic systems.

**Admissions:**

1. Apply to MTC at <https://manateetech.edu/apply-now/>. Submit your application to access your "To-Do List." You are not accepted into the program after applying, you must complete your do list.
2. View the Main Campus Virtual Information Session handout:
3. View the Main Campus Virtual Information Session video: [Click Here](#)
4. 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 1550 hours – approximately 12 months full-time to complete.

OCP	COURSE	HOURS
A	Electronic Assembler – EEV0010	250
B	Electronics Tester – EEV0100	400
C	Electromechanical Assembler – EEV0752	500
D	Mechatronic Technician – EEV0753	400

**Dual Enrollment:** No

<b>Program #J200200</b>	<b>CIP# 0615049901</b>
Estimated Tuition, Lab, and Fees ( <i>includes \$60.00 administrative fee</i> )	\$6,413.00
<b>Additional Fees Due Prior to Admittance</b>	
Application Fee	\$45.00
<b>Bookstore</b>	
Uniform - <i>estimate</i>	\$80.00
Textbook(s)* - <i>estimate</i>	\$202.00
<b>Additional Required Items (Outside Vendor)</b>	
Shoes (Closed toe steel)	\$50.00
<b>Estimated Total Cost of Program</b>	<b>\$6,790.00</b>

**Certification/Licensure:** SolidWorks Associate Certificate, NIMS Maintenance Certs.

**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

**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.

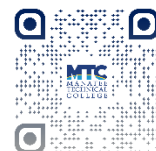
All pre-admission fees are non-refundable and not covered by Financial Aid. \*Prices are subject to change.

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**