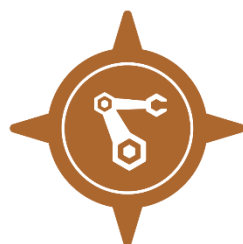


# GUIDED PATHWAY: ADVANCED MANUFACTURING/MECHATRONICS TECHNOLOGY CERTIFICATE

MANUFACTURING and INDUSTRIAL TECHNOLOGY CAREER PATH



For more information, visit the [Dallas College Mechatronics webpage](http://www.dcccd.edu/Mechatronics) [www.dcccd.edu/Mechatronics] and your academic advisor at the Eastfield Campus.

This is an example course sequence for students interested in pursuing the Advanced Manufacturing/ Mechatronics Technology Certificate. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn a certificate in Advanced Manufacturing/ Mechatronics Technology. Courses from this certificate may apply to the related A.A.S. degree. Students must earn at least 25% of the credit hours required for graduation through instruction by Dallas College. See catalog for [official certificate requirements](#).

Advanced manufacturing/mechatronics technology merges electronics, mechanics, fluid power, PLC and computer controls with sensors, transducers and actuators to manufacture a product or perform a task with minimal human intervention. This frees people from the routine tasks and allows them to focus on solving problems, fixing equipment breakdowns or changing processes for better operation. A person with these diverse skill sets has a wider range of employment opportunities and is prepared to adapt to changes in industry. The technician with training in advanced manufacturing/mechatronics will be ready to take advantage of the new developments in industry and realize their potential to grow with changes in the global economy. Courses that complete the Advanced Manufacturing/Mechatronics Technology Certificate are noted below.

Students pursuing this certificate are waived from the [Texas Success Initiative \(TSI\)](#) standards, but must meet course prerequisites.

<b>Catalog Year</b>	2020-2021	You may use this pathway if you entered Dallas College on or before this date.
<b>Degree Type</b>	Level I Certificate	
<b>GPA Requirement</b>	Student must earn a GPA of 2.0 or higher	
<b><a href="#">TSI</a></b>	May be Exempt	

## SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS

All plans can be modified to fit the needs of part-time students. This is not an official degree plan. See catalog for [official certificate requirements](#).

### CERTIFICATE MINIMUM: 16 SEMESTER CREDIT HOURS

#### SEMESTER 1

**Total Hours: 8**

[ELPT 2419](#) – Programmable Logic Controllers I

[MFGT 1406](#) – Mechanical Principles in Automated Manufacturing

#### SEMESTER 1 ACTION ITEMS

1. Meet with your advisor to confirm academic and career goals before the end of the semester.
2. Meet with a career advisor or coach to research your career options and opportunities for job shadowing.

#### SEMESTER 2

**Total Hours: 8**

[MFGT 1404](#) – Automated Manufacturing

**CHOOSE ONE:** [ELMT 1405](#) – Basic Fluid Power *capstone course for the certificate* **OR**  
[MFGT 2459](#) – Industrial Automation II *capstone course for the certificate*

#### SEMESTER 2 ACTION ITEMS

1. Meet with your advisor to request an official program of study audit and confirm or update your academic and career path and program of study.

2. Meet with your advisor to apply for the Advanced Manufacturing/Mechatronics Technology Certificate Completion.

**PATHWAY TOTAL: 16 SEMESTER CREDIT HOURS**