

MECHATRONICS SUPPLY CHAIN TECHNICIAN CERTIFICATE

12 Semester Credit Hours; Curriculum: 0264

This certificate prepares students for careers in Supply Chain Management (SCM). Possible jobs positions would be in technical support and overseeing of the flow of goods and services. It includes the movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption.

Code	Title	Hours
Courses for a Certificate		
MFG 111	Introduction to Computer Integrated Manufacturing (CIM)	3
MFG 135	Hydraulics, Pneumatics and Controls	3
MGT 155	Operations and Supply Chain Management	3
MGT 156	Introduction to Transportation, Warehousing and Logistics	3
Total Hours		12

Program Learning Outcomes

1. Outline basic ideas of industrial automation in modern manufacturing including Programmable Logic Controllers (PLC), Robotics, and CIM.
2. Explain the basic physics principals, design parameters, and limitations of both pneumatic and hydraulic (fluid power) systems.
3. Describe supply chain management including: strategies, quality control, process layout, capacity, forecasting, sourcing and purchasing, and logistics.
4. Interpret logistics concepts including the management of inventory, packaging, warehousing, materials handling, order processing, and customer service.

Mechatronics Supply Chain Technician Certificate Pathway

The following Pathway is recommended for students pursuing the Mechatronics Supply Chain Technician Certificate.

Course	Title	Hours
First Year		
Fall Semester		
MFG 111	Introduction to Computer Integrated Manufacturing (CIM)	3
MGT 155	Operations and Supply Chain Management	3
	Hours	6
Spring Semester		
MFG 135	Hydraulics, Pneumatics and Controls	3
MGT 156	Introduction to Transportation, Warehousing and Logistics	3
	Hours	6
	Total Hours	12

Note: Pathway is a recommended sequence of courses. Students should contact the department chair or program coordinator with questions about course prerequisites and recommendations.