

MECHATRONICS: CERTIFIED MAINTENANCE TECHNICIAN - CERTIFICATE

Career Pathways Certificate of Completion

Faculty Adviser

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This program provides students with knowledge of basic mechanical and electrical systems used in industrial settings. Students will learn topics that prepare them for entry level work, such as: solving problems, safety, measurement, and pneumatics.

Courses must be completed with a "C" grade or higher and must be completed within 5 years in order to be awarded the certificate.

Program Outcomes

At the completion of this program, students should be able to:

- Demonstrate appropriate industrial safety practices in a manufacturing environment
- Participate effectively in a workplace environment
- Apply a systematic approach to troubleshooting problems
- Read and interpret industrial schematics
- Demonstrate intermediate level knowledge of pneumatic, mechanical, and electrical systems
- Describe and perform basic machining processes on ferrous metals
- Use hand and shop tools effectively to complete common maintenance tasks
- Identify and use appropriate test equipment

All MEC courses must be completed with a "C" grade or higher.

First Quarter

Fall		Credits
MEC101	Introduction to Mechatronics	1
MEC110	Introduction to Manual Machine Tools	3
MEC112	Measurement Tools	3
MEC121	Mechanical Drives I	4
MEC131	AC/DC Electrical Systems	3
Credits		14

Second Quarter

Winter		
MEC113	Industrial Safety	2
MEC122	Mechanical Drives II	4
MEC132	Electric Motors	4
MEC141	Pneumatics I	3
Credits		13

Third Quarter

Spring		
MEC123	Mechanical Drives III	4
MEC142	Pneumatics II	2
Credits		6

Fourth Quarter

Fall

MEC133 or MEC231	Motor Controls or Introduction to Programmable Logic Controllers	4-5
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*MEC231 is only offered Spring term.

Credits	4-5
Total Credits	37-38