

**Mechatronics**

Mission

TO train students in the areas of Pneumatics, Hydraulics and Electronic controls to the latest industry standards.

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2025-2026

**Mechatronics Learning Outcomes**

Electro-Pneumatic System Design

The learner will design electro-pneumatic systems.

MEASURES	RESULTS	ACTIONS
<p><b>Final Project</b></p> <p>Direct - Assignment</p> <p><i>Mechatronics I: MFGT 1560</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
<p><b>Second Year Capstone Project</b></p> <p>Direct - Assignment</p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

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Electro-Pneumatic System Construction

The learner will build electro-pneumatic systems.

MEASURES	RESULTS	ACTIONS
<p><b>Final Project</b></p> <p>Direct - Assignment</p> <p><i>Mechatronics I: MFGT 1560</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
<p><b>Second Year Capstone Project</b></p> <p>Direct - Assignment</p> <p><b>Target</b></p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

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80% of students will earn a grade of C or better.		
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Troubleshooting Electro-Pneumatic Systems

The learner will diagnose electro-pneumatic systems.

MEASURES	RESULTS	ACTIONS
<p><b>Diagnostics Assignment/Lab</b></p> <p>Direct - Assignment</p> <p><i>Mechatronics II: MFGT 2545</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
<p><b>Second Year Capstone Project</b></p> <p>Direct - Assignment</p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

Electro-Hydraulic System Design

The learner will design electro-hydraulic systems.

MEASURES	RESULTS	ACTIONS
<p><b>Hydraulic Components Final Exam</b></p> <p>Direct - Exam (Course)</p> <p><i>Hydraulic Components: FLPO 1529</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

Electro-Hydraulic System Construction

The learner will build electro-hydraulic systems.

MEASURES	RESULTS	ACTIONS

**Mechatronics**

<p><b>Hydraulic Components Final Exam</b></p> <p>Direct - Exam (Course)</p> <p><i>Hydraulic Components: FLPO 1529</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
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Troubleshooting Electro-Hydraulic Systems

The learner will diagnose electro-hydraulic systems.

MEASURES	RESULTS	ACTIONS
<p><b>Hydraulic Components Final Exam</b></p> <p>Direct - Exam (Course)</p> <p><i>Hydraulic Components: FLPO 1529</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

Industry-Standard CAD for Mechatronics

The learner will design Mechatronics systems using industry-current CAD software.

MEASURES	RESULTS	ACTIONS
<p><b>Final Grade</b></p> <p>Indirect - Overall Course Grade</p> <p><i>Electrical Design for Mechatronics Systems: MFGT 2555</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

**Mechatronics**

<p><b>Final Grade</b></p> <p>Indirect - Overall Course Grade</p> <p><i>Engineering Drafting: MFGT 1550</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
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Software-Based Automation Programming

The learner will program automated systems using their related software.

MEASURES	RESULTS	ACTIONS
<p><b>Final Grade</b></p> <p>Indirect - Overall Course Grade</p> <p><i>Manufacturing Automation: MFGT 2560</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
<p><b>Final Grade</b></p> <p>Indirect - Overall Course Grade</p> <p><i>Manufacturing Automation Lab: MFGT 2564</i></p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>

Professional Collaboration in Technical Environments

The learner will demonstrate collaboration with others to accomplish work tasks.

MEASURES	RESULTS	ACTIONS
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**Mechatronics**

<p><b>Final Grade</b></p> <p>Successful completion of all lab courses. Indirect - Overall Course Grade</p> <p><b>Target</b></p> <p>80% of students will earn a grade of C or better in all lab classes.</p>	<p><i>No results have been added.</i></p>	<p><i>No actions have been added.</i></p>
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