

Industrial Mechatronics (642)

Associate of Applied Science

ABOUT OUR PROGRAM

When graduates of the Mechatronics program enter industry, they bring with them the wide range of skills that local and regional employers are seeking.

They have experience with electricity and electronics, pneumatics and hydraulics, sensors and motors, and tool usage. Graduates will be versed in welding, machining, and other manufacturing processes, as well as troubleshooting as it relates to industrial equipment.

The degree includes health and safety instruction and an internship where students develop skills while applying their maintenance knowledge.

NATURE OF WORK AND EMPLOYMENT

This breadth of knowledge and experience will prepare Mechatronics graduates for entry level employment at any facility that requires general maintenance and repair. This would include, but is not limited to, fabrication, food processing, distribution, value added agriculture, or any business that utilizes automation.

PROGRAM CONTACTS

Call Highland at 815–235–6121 for the following program contacts:

- Scott Anderson, Dean of Business & Technology
- Steve Gellings, Electronics Faculty
- Thedford Jackson, Transfer Coordinator/Student Advisor

First Semester

14 Sem. Hours

*	BUSN	141	Business Communications (or ENGL 121 or COMM 101)	3			
	DRAF	110	Print Reading and Inspection	2			
*	ELET	179	Electronic Principles	3			
*	INFT	180	Introduction to Information Systems	3			
*	MATH	111	Technical Math (or higher level)	3			
Second Semester 15 Sem. Hou							
*	ELET	182	Devices and Circuits I	3			
*	ELET	293	Intro to Programmable Logic Controllers	3			
	MTEC	120	Equipment Maintenance Skills	3			
*	MTEC	151	Machine Processes	З			

Summer

4 Sem. Hours

3

* OCED 290 Workplace Experience

General Hydraulics

Third Semester

263

* MTEC

15 Sem. Hours

*	ELET	220	Motors and Controls	3
*	ELET	297	Advanced Programmable Logic Controllers	3
*	ELET	291	Introduction to Automation	3
*	MTEC	210	General Pneumatics	3
	WELD	130	Introduction to Welding (or WELD 135)	3

Fourth Semester 12 Sem. Hours OCED 117 Occupational Safety 1 OCED 118 Health and Safety Topics 1 SPCH 191 Fundamentals of Speech Communications 3 WELD 232 Intermediate Welding and Fabrication 3 Elective 4

Total Hours =

60

* Course has a prerequisite. See course descriptions.