

Mechatronics

2018-2019 Catalog

Award Granted Upon Completion: Certificate in Mechatronics

Credits/Contacts Required: **24/24**

Major code: 04/438

CIP Code: 150403

Description

Mechatronics is a relatively new term used to describe how computers control electrical and mechanical systems. Mechatronics is present in any automated system, from HVAC (Heating, Ventilating and Air Conditioning) systems to robotic assembly lines. The Mechatronics certificate is designed to provide an introduction to principles and basic skills used in a wide variety of fields. Students will learn the principles needed to install, maintain, and repair mechanical, electrical, control, and fluid power systems.

Requirements – Min 24 credits

ELEC-130	Circuit Fundamentals I	4
ELEC-180	Electrical Machinery and Controls	4
ELEC-285	Fluid Power	4
XXXX-XXX	Approved Electives*	12

***Approved Electives (Choose 12 credits)**

ELEC-145	Basic Process Control	4
ELEC -290	Introduction to Programmable Logic Controllers	4
MATH-102	Introduction to Technical Math	4
TECH-100	Basic Machine Tool Operation	4
TECH-101	Blueprint Reading	2
TECH-105	Materials of Industry	4
WELD-110	Introduction to Oxygen-Fuel Welding and Cutting	3
WELD-120	ARC Welding	4

Suggested Sequences Per Semester

		<u>Cr / Ct</u>
First Semester		
ELEC-130	Circuit Fundamentals I	4/4
ELEC-285	Fluid Power	4/4
XXXX-xxx	Approved Elective	4/4
		<hr/>
		12/12
Second Semester		
ELEC-180	Electrical Machinery and Controls	4/4
XXXX-xxx	Approved Elective	4/4
XXXX-xxx	Approved Elective	4/4
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		12/12


Bay De Noc Community College

Undergraduate certificate in Mechatronics

Program Length: 12 months

[Print](#)

Students graduating on time

N/A* of Title IV students complete the program within 12 months 

*Fewer than 10 students enrolled in this program. This number has been withheld to preserve the confidentiality of the students.

Program Costs*

\$3,744 for in-state tuition and fees

\$6,888 for out-of-state tuition and fees

\$1,200 for books and supplies

[Other Costs](#)


[Visit website for more program cost information](#)

*The amounts shown above include costs for the entire program, assuming normal time to completion.

Note that this information is subject to change.


Students Borrowing Money

The typical graduate leaves with

N/A* in debt 

*Fewer than 10 students completed this program within normal time. This number has been withheld to preserve the confidentiality of the students.

The typical monthly loan payment

N/A* per month in student loans with an interest rate of **N/A***. 

*Fewer than 10 students completed this program within normal time. This number has been withheld to preserve the confidentiality of the students.

Graduates who got jobs

N/A* of program graduates got jobs

*We are not currently required to calculate a job placement rate for program completers.

Program graduates are employed in the following fields: [Electro-Mechanical Technicians](#)

[Robotics Technicians](#)

Licensure Requirements

The following do not have licensure requirements for this profession:

Michigan

[Additional Information](#)

Date Created 2/27/2018

These disclosures are required by the U.S. Department of Education