

Mechatronics, Certificate

2023-2024 Catalog

Award Granted Upon Completion: Certificate in Mechatronics

Credits/Contacts Required: **32/32**

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 32 Credits)

- ELEC 130 - Circuit Fundamentals I **Credit(s): 4**
- ELEC 180 - Electrical Machinery & Controls **Credit(s): 4**
- ELEC 285 - Fluid Power **Credit(s): 4**
- XXXX xxx - Approved Electives **Credit(s): 20**

*Approved Electives (20 Credits)

- CADD xxx - Any CADD Course
- CNSS 130 - Introduction to Networks **Credit(s): 4**
- CNSS 150 - A plus Computer Maintenance **Credit(s): 4**
- ELEC xxx - Any ELEC Course
- TECH xxx - Any TECH Course
- WELD 110 - Metal Processing Fundamentals **Credit(s): 3**
- WELD 120 - Arc Welding **Credit(s): 4**

Suggested Sequences Per Semester

First Semester

- ELEC 130 - Circuit Fundamentals I **Credit(s): 4**
- ELEC 285 - Fluid Power **Credit(s): 4**
- XXXX xxx - Approved Electives **Credit(s): 8**

First Semester Total - Credit(s): 16 | Contacts: 16

Second Semester

- ELEC 180 - Electrical Machinery & Controls **Credit(s): 4**
- XXXX xxx - Approved Electives **Credit(s): 12**

Second Semester Total - Credit(s): 16 | Contacts: 16