

MECHATRONICS

Program Description

The mechatronics program is developed around the interface of mechanical and electrical systems frequently used in manufacturing. Other applied fields involve commercial and industrial companies that use automated mechanical and electrical systems to assemble, separate, monitor, and transfer products.

Through sequenced coursework, students learn how to integrate various types of electrical, pneumatic, and mechanical motors. Specifically, instruction focuses on the use of Program Logic Controller (PLC) programming and diagnostics. Students will also learn how to read and create schematics for mechanical-electrical component production and installation for real-world applications.

Ultimately, students will build functioning interdependent PLC-driven systems using hydraulic, pneumatic, electrical, and motor controls. Using this combination of software and hardware culminates in the construction of a fully functioning assembly line trainer to help students develop the design, implementation, and troubleshooting skills required across various industries. Hands-on experience is provided through our on-campus labs as well as the Sturm-ANB Bank Mobile Learning Lab, a state of the art mobile lab, that incorporates modern manufacturing equipment and controllers to create a mini manufacturing floor specifically designed for learning. The Mobile Learning Lab is used to provide experience in operations, troubleshooting, and repair of electromechanical systems.

Contact Information

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Programs of Study

Associates

- [Mechatronics \(AAS\)](#)

Certificates

- [Mechatronics: Automation and Instrumentation \(Technical Certificate\)](#)
- [Mechatronics: Electronics Technician \(Technical Certificate\)](#)