



Mechatronics

AAS (60 SCH*)

*Semester Credit Hour

7/2023

First Semester - 15 SCH

CETT 1409 - DC-AC Circuits
 ELMT 2333 - Industrial Electronics
 ELPT 1221 - Introduction to Electrical Safety and Tools
 MATH 1332 - Contemporary Math
 PSYC 1300 - Learning Framework

Second Semester - 15 SCH

CETT 1349 - Digital Systems
 HYDR 1345 - Hydraulics and Pneumatics
 INTC 1341 - Principles of Automatic Control
 RBTC 1301 - Programmable Logic Controllers
 RBTC 1351 - Robotic Mechanisms

Third Semester - 15 SCH

COSC 1301 - Introduction to Computing
 ELMT 2337 - Electronic Troubleshooting, Service and Repair
 ELPT 1351 - Electrical Machines
 ELPT 2319 - Programmable Logic Controllers I
 SPCH 1321 - Business & Professional Communication

Fourth Semester - 15 SCH

ELPT 2355 - Programmable Logic Controllers II
 ENGL 1301 - Composition I
 ENTC 1349 - Reliability and Maintainability
 INMT 2345 - Industrial Troubleshooting
 DRAM 1301 - Theater Appreciation

Marketable Skills

- Acquire and evaluate information
- Interpret and communicate information
- Use computer software to maintain production
- Problem-solving
- OSHA - General Industries
- Maintain digital and solid state devices
- Repair and maintain fluid and pneumatic systems
- Monitor mechanical and electronic devices, circuits, and systems used in automated manufacturing or process control
- Electronic system maintenance, troubleshooting and repair
- Use programmable logic controllers
- Installation, maintenance and repair of automatic control systems
- Install, maintain and repair robotic mechanisms
- Installation, maintenance and repair of four bar linkages, cams, gears and gear trains.

High School Endorsements

Business and Industry

Expected Salary

Texas wage data: workers on average earn \$117,650; 10% of workers earn \$64,300 or less; 10% of workers earn \$178,120 or more.

Career Opportunities

Electronics Technician; Electromechanical Technician; Maintenance Technician-Electrical and Mechanical; Industrial Electrician; Industrial Mechanic; Robotics Technician; Wind Turbine Technician; Field Service Technician; Manufacturing Systems Technician; Automation Technician; Process Technician; Power Plant Technician; Fluid Power Technician; Equipment Technician; Power Tool Repair Technician; Plant Engineering Systems Technician; Engineering Technician.

Program Outcomes

Maintain equipment in an industrial setting including the use of Programmable Logic Controllers, Variable Frequency Drives, hydraulic and pneumatic systems, communications between systems and mechanical systems.

Additional Education Opportunities

Bachelor of Arts in Applied Science