

## Manufacturing Cluster



Mechatronics is the combination of several disciplines, Electrical Engineering, Mechanical Engineering, Computer Engineering, and Robotics. The combination of these engineering disciplines creates design, development, and control of very complex systems used in a range of industries. Mechatronics is a field that changes daily with the rapid improvements in technology and computer systems. Students are trained to meet the necessary entry-level skills and prepared to enter post-secondary school. Students will read blueprints, schematics, and diagrams to determine the method and sequence of assembly parts or machine. Students will calibrate hydraulic and pneumatic assemblies. Students will verify dimensions of parts, using precision measuring instruments. Students will operate metalworking machines to make housings, fittings, and fixtures. Students will test the performance of electro-mechanical assemblies using test instruments; and install electronic parts and hardware using soldering equipment and hand tools.

### Period of Class and Grade Level

Mechatronics is a two (2) year program.

Grade levels: 10, 11, 12      Level 1: AM session      Level 2: PM session

### Certifications

Upon completion of this two-year program, students may earn the following certifications:

- NIMS and OSHA-10 Safety Training

### Job Skills & Requirements

- Work environment requires standing on concrete floor.
- Ability to follow safety rules and willing to wear protective gear at all times.
- Strong ability to read and interpret engineering drawings and blueprints.
- Strong ability to read and interpret precise measurements.
- Use power tools and mechanical training systems
- Attention to detail is very important

### Cost to Student

Students pay \$100 for a uniform and tools, which are theirs to keep. (fee subject to change)

### Estimated Pay

Estimated pay salaries for a person in the Mechatronics field

Job Description	Hourly Mean Wage	Estimated Annual Mean Wage
Mechanical Technician (Associate's Degree)	\$26.22	\$53,740
Electrical Engineer (Bachelor's Degree)	\$47.63	\$99,070