Manufacturing Cluster

Mechatronics is defined as the combining 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 including manufacturing, medicine, aircraft, and all service industries. Mechatronics is a field that changes daily with the rapid improvements in technology and computer systems. Systems are networked to meet the demands of automated industrial processes and students are trained to meet these necessary entry-level skills as well as entry into a post-secondary school. Students will read blueprints, schematics, and diagrams to determine the method and sequence of assembly parts, machine, or piece of equipment. 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.

Program Duration & Grade Level

Mechatronics is a two (2) year program

Once a student starts in 11th grade, they will be required to continue and complete the Mechatronics program in their 12th grade year.

Certifications & Qualifications

Upon completion of this two-year program, students will receive the following certifications: NIMS Certification and OSHA-10

Requirements for Program

- Completion of Algebra I
- Complete Mechatronics I with an 80 or higher

Estimated Pay

Estimated pay salaries for a person in the Mechatronics field

Job Description	Degree	Estimated Starting Salary
Electro-Mechanical Technician	Associate Degree	$53,411
Electrical Engineer	Bachelor's Degree	$73,493
Mechanical Engineer	Bachelor's Degree	$64,585

Bonds Career Center accepts students based upon a rubric considering attendance, discipline, grades, and teacher recommendations. Administrators will consider mitigating factors on a case-by-case basis. Administrators may revoke student privileges at any time for failure to meet program requirements. The maximum enrollment for this class is 16 students due to safety requirements, accreditation rules, and facility/equipment limitations.