**Employer:**  **Pay:**

**Position:** Robotics Automation Tech

**Career Interest:**  Machining / Manufacturing / Quality Control

**Location:**

**Availability:** *5- 15 hrs./week when school is in session with the option for full-time during summer*

**Expectations:** *Students will work in this internship to develop competencies and knowledge in Robotics and Manufacturing to enable them to better discern a career in this occupational area. Students will start by observing and learning and progress to executing tasks as directed by their supervisor. Students will be expected to meet the same criteria as full-time employees regarding a drug-free workplace, maintaining confidentiality, and meeting the requirements of their particular position in the hours employed. Employer will be expected to comply with providing a safe work environment according to the Occupational Safety and Health Administration (OSHA) and compliance with Federal and Ohio Minor Employment Laws if the student is under 18.*

**Responsibilities:**

* Assist in the manufacturing and testing of electrical/mechanical assemblies for robotic and factory automation systems.
* Assist in building, testing, and repairing electrical and mechanical sub-assembly components and systems.
* Assist in analyzing, troubleshooting, and repairing complex technical problems on a broad product line of PC Board, AC Servo Motor, Inverters, and AC Servo Drives to the component level.
* Assist in planning machining by studying work orders, blueprints, engineering plans, materials, specifications, orthographic drawings, reference planes, locations of surfaces, and machining parameters; interpret geometric dimensions and tolerances (GD&T).
* Assist in programming mills and lathes by entering instructions, including zero and reference points; setting tool registers, offsets, compensation, and conditional switches; calculating requirements, including basic math, geometry, and trigonometry; and proving part programs.
* Assist in loading feed mechanism by lifting stock into position.
* Assist in verifying settings by measuring positions, first-run parts, and sample workpieces, adhering to international standards.
* Assist in maintaining safe operations by adhering to safety procedures and regulations.
* Assist in maintaining equipment by completing preventive maintenance requirements, following manufacturer’s instructions, troubleshooting malfunctions, and calling for repairs.
* Take an active interest in learning the job by participating in educational opportunities and learning from peers.

**Desired Skills:**

* Can perform the basic arithmetic operations of addition, subtraction, multiplication, and division using whole numbers, fractions, decimals, and mixed numbers, and can make conversions among fractions, decimals, and percentages.
* Mechanical Aptitude: like working with your hands and taking things apart and putting them back together.
* Organized, focused, and a planner with excellent time management skills.
* Team and service-oriented, interested in helping people, disciplined, cooperative, and problem solver.
* Ability to communicate clearly and concisely, both verbally and in writing.
* Can perform the basic arithmetic operations.
* Basic working proficiency in Microsoft Word and Excel and experience communicating through email, including with attachments.

**Educational Goals:**

* Exposure to multiple manufacturing professionals and career opportunities.
* Understanding of robotics.
* Safety awareness by learning to identify potential hazards and work safely in a manufacturing environment.
* Computer-aided manufacturing by becoming proficient with software programs that control the operation of manufacturing machines.
* Develop professional communication skills in phone conversations and in writing via email exchanges and via technology solutions.
* Develop critical thinking and problem-solving skills using logic and reasoning to identify the risks.
* Learn ISO standards and relevant industry-specific standards (e.g., OSHA).
* Become familiar with standard manufacturing processes like Six Sigma, Kaizen, Lean Manufacturing, DOE, FMEA, and DMEAIC.
* Exposure to manufacturing tools and equipment and knowledge of when and how to use them and how to repair them.
* Microsoft Office skills.