



## Manufacturing and Automation

### PROGRAM OVERVIEW

In this two year program, students will apply engineering design processes to authentic project-based assignments. Students will engage in 3-D computer-aided design, documentation, prototyping, testing and analysis. Students will also design modern production systems, create energy efficient work cells and explore robotics with the programmable logic controllers and computer numerical control systems. Students will also use advanced measurement tools to gather quality control data and apply principles from Six Sigma, lean manufacturing, statistical process control, total quality management and inventory control to design just-in-time production systems. Manufacturing and Automation appeals to students who want to work with cutting-edge materials, use their knowledge of physical and biological sciences and like to create products emerging from new advanced technologies in cost-effective ways.

### SALARY AND CAREER OUTLOOK

The industry projects the starting salaries of Manufacturing and Automation graduates to average \$60,000.00 with an opportunity to increase earnings with overtime. With 50% of the industry labor force eligible for retirement within 10 years, continued development of new technologies, and new discoveries, the industry need for qualified employees should continue to increase.