

ROBOTICS & AUTOMATION

2022-2023



Robotics & Automation provides students with skills applicable to careers in engineering and the industrial field. Students will learn electrical and electronic fundamentals, automated machinery components, and control system design. They'll also learn how to program industrial control devices and robots. Students enrolled in this program can directly enter the workforce in an entry-level capacity, or choose to further their education after graduation. Robotics & Automation is part of the Advanced Manufacturing Academy. Senior students have the opportunity to engage in advanced-elective course work in any of the manufacturing areas: Computer-Aided Design, Precision Machining, Robotics & Automation, and Welding. This opportunity provides students with a more diverse skill-set to enter a career in manufacturing.

Program Highlights:

- Learn the fundamentals of electricity and electronics while exploring how industrial control systems and automations systems are designed and operated
- Program, operate and troubleshoot common industrial control devices used in today's manufacturing industry
- Work with industrial robots and integrate robots with other programmable devices and systems

The Program Focuses on the Following State Approved Courses:

- Robotics
- Industrial Robotics
- DC Electronic Circuits



COST-FREE COLLEGE CREDIT OPPORTUNITIES

College Credit Plus through Owens Community College

- MET 150: Intro to Industrial Robotics (2 Credit Hours)

Career Technical Assurance Guides (CTAGs)

- CTS001: OSHA 10-Hour Safety (1 Credit Hour)
- CTEET001: DC Circuits (3 Credit Hours)
- CTEET003: Programmable Logic Controllers (3 Credit Hours)

Articulated Credits through Hocking College – 3 Credit Hours

INDUSTRY-RECOGNIZED CREDENTIALS (POINT VALUES)

- Fanuc-Handling Tool Operation & Programming J2P0310 IACT Approved (6 Points)
- OSHA 10-Hour Training (1 Point)
- Allen Bradley / Rockwell Automation PLC (6 Points)

OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY

OCCUPATION TITLE	TYPICAL SALARY-BOTTOM 10%	TYPICAL SALARY-MEDIAN	TYPICAL SALARY-TOP 10%	TYPICAL EDUCATION	ANNUAL JOB OPENINGS
Maintenance Workers, Machinery*	\$32,660	\$51,340	\$75,430	HS Diploma or Equivalent	310
Industrial Engineering Technologists & Technicians*	\$35,380	\$52,090	\$78,720	Associate's Degree	310
Mechanical Engineering Technologists & Technicians*	\$36,190	\$53,180	\$78,950	Associate's Degree	250
Industrial Machinery Mechanics*	\$37,470	\$55,770	\$78,240	HS Diploma or Equivalent	1,920
Electrical & Electronics Repairers, Commercial & Industrial Equipment*	\$38,400	\$58,830	\$79,900	Postsecondary Certificate	180
Robotics Engineers*	\$51,010	\$94,740	\$154,300	Bachelor's Degree	570
Industrial Engineers*	\$55,780	\$82,590	\$125,140	Bachelor's Degree	1,300
Industrial Production Managers*	\$62,520	\$103,130	\$177,270	Bachelor's Degree	870

JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2021; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.

*Denotes an In-Demand Occupation in the State of Ohio

Instructor: Matthew Wegert 419.666.1120 Ext. 1411 mwegert@pentacc.org

Supervisor: Dave Stacklin 419.661.6553 dstacklin@pentacc.org

Career Services: Marshall Wolf 419.661.6372 mwolf@pentacc.org

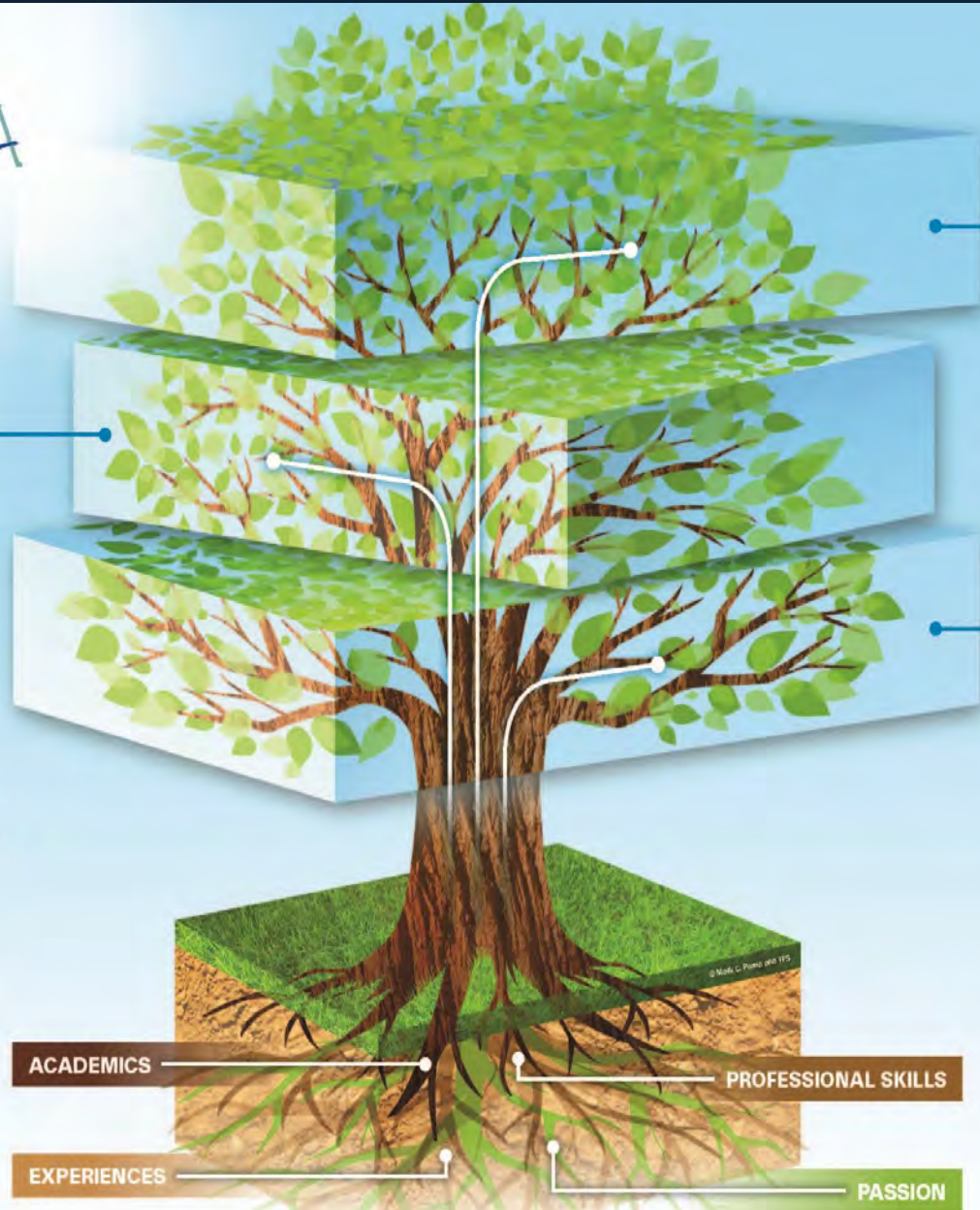
Admissions: Tricia Hornyak 419.661.6498 thornyak@pentacc.org

EDUCATION WITH PURPOSE
CAREER TREE



TECHNICAL CAREERS

- Industrial Maintenance Electrician
- Installation & Facilities Electrician
- Electrical/Electronic Controls Technician
- Robotics Technician
- Production/Inventory Control Supervisor
- PLC Programmer
- Maintenance Supervisor
- Quality Control Technician
- Production/Shop Floor Supervisor
- Field Service Technician
- Machine Guarding/Safety Technician



PROFESSIONAL CAREERS

- Electrical/Electronic Engineer
- Robotics Engineer
- Control Systems Design Engineer
- Systems Integrator
- Process Engineer
- Project Manager
- Engineering Group Manager
- Industrial Controls Sales & Service
- Robotics Sales & Service
- Maintenance Manager
- Engineering Director

ENTRY-LEVEL CAREERS

- Apprentice Maintenance Electrician
- Apprentice Installation & Facilities Electrician
- Electrical Control System Assembler
- Associate Robotics Technician
- Manufacturing System Operator
- Electrical Panel Wiring & Assembly
- Associate Field Service Technician
- Associate PLC Programmer
- Associate Quality Control Technician
- Inventory Control System Operator
- Production Assembler

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