



# CAREER & TECHNICAL EDUCATION AREA



# IVY TECH ADVANCED AUTOMATION & ROBOTICS

## PROGRAM DESCRIPTION

The AART program offers technology students opportunities to develop and master a wide variety of skills in areas such as: robotic and automation system installation and troubleshooting, preventative and predictive maintenance, PLC and robotic programming, component identification and modification, and continuous system improvement.

## OVERVIEW

The Advanced Automation and Robotics (AART) program at Ivy Tech offers hands-on learning coupled with interactive training using state of the art equipment and the latest technologies. Classes are taught by knowledgeable faculty who have experience and knowledge in world-class manufacturing and who are motivated to ensure that the Ivy Tech student experience is the very best.

Students have the opportunity to diversify their educational experiences and skill sets through a variety of course offerings all under one roof at the school of technology. In addition, our technical math and communication courses were developed especially for technical students; no more theory based courses with limited applications to the trades and industry.

Ivy Tech works with many business and industrial partners to offer students work-based learning and internship experiences. Course scheduling is designed to accommodate working students with flexibility for day or night classes. Students earn "stackable" degrees as they progress through the coursework, with multiple opportunities to earn industry recognized certifications which are embedded into the classes.

## ADDITIONAL INFO

**GRADE LEVEL:** 11TH OR 12TH

**LENGTH OF PROGRAM:** 1 OR 2 YEARS - 1/2 DAY

**HS CREDITS PER SEMESTER:** 3

**HS CREDITS PER YEAR:** 6

**PROGRAM WEBSITE:** [IVYTECH.EDU](http://IVYTECH.EDU)

## COURSE INFO - YEAR 1



### FALL SEMESTER COURSES:

#### INDT 113 - Industrial Electrical I

(3 Cr Hrs) M/W 8:00am-11:45am (1st 8 weeks)

#### SMDI 110 - Introduction to Industrial Internet of Things

(3 Cr Hrs) TH 8:00am-11:45am (1st 8 weeks)

#### SMDI 111 - Tech in Smart Manuf. & Digital Integrations

(3 Cr Hrs) TH 8:00am-11:45am (2nd 8 weeks)



### SPRING SEMESTER COURSES:

#### INDT 104 - Fluid Power I

(3 Cr Hrs) T/TH 8:00am-11:50am (1st 8 weeks)

#### ADMF 222 - Fluid Power II

(3 Cr Hrs) T/TH 8:00am-11:50am (2nd 8 weeks)



### FEES:

#### Course Fees:

INDT113 - \$135 Supplies, consumables, eLearning

INDT104 - \$135 Supplies, eLearning

ADMF222 - \$135 Supplies, consumables eLearning

Ivy Tech Technology Fees\*: \$60 per semester

Tuition: Twin Rivers pays ALL CTE course tuition. Student pays for fees and books.

**PROGRAM CHAIR: MOLLY JOSEPH**

Phone: 812-298-2335

[mjoseph22@ivytech.edu](mailto:mjoseph22@ivytech.edu)

\*FEES ARE APPROXIMATE AND COULD VARY FROM YEAR TO YEAR



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# IVY TECH

## ADVANCED AUTOMATION & ROBOTICS YEAR 2

### OUR GRADUATES:

Graduates of the AART program will be able to work as an automated equipment technicians, robotic programmers and/or technicians, and other associated careers in almost any industry. Students earn several certifications that make them potentially valuable to employers including: NOCTI - FANUC Certified Robot Operator-1, OSHA 10 certification, Smart Automation Certification Alliance certifications, and the Siemens Level 1 certification.

### DOE CODES:

- 7108 Principles of Advanced Manufacturing
- 7103 Advanced Manufacturing Technology
- 7106 Mechatronics Systems
- 7224 Industrial Automation and Robotics Capstone

### ADDITIONAL INFO

**GRADE LEVEL:** 11TH OR 12TH

**LENGTH OF PROGRAM:** 1 OR 2 YEARS - 1/2

**DAY**  
**HS CREDITS PER SEMESTER:** 3

**HS CREDITS PER YEAR:** 6

**PROGRAM WEBSITE:** [IVYTECH.EDU](http://IVYTECH.EDU)

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### COURSE INFO - YEAR 2



#### FALL SEMESTER COURSES:

**ADMF 122 - Industrial Electrical II**

(3 Cr Hrs) M/W 1:00pm-4:45pm (2nd 8 weeks)



#### SPRING SEMESTER COURSES:

**INDT 203 - Machine Maintenance & Installation**

(3 Cr Hrs) T/TH 1:00pm-4:45pm (1st 8 weeks)

**ADMF 112 - Mechanical Drives**

(3 Cr Hrs) T/TH 1:00pm-4:45pm (2nd 8 weeks)



#### FEES:

##### Course Fees:

ADMF122 - \$135 Supplies, consumables, eLearning

**Ivy Tech Technology Fees\*:** \$60 per semester

**Tuition:** Twin Rivers pays ALL CTE course tuition. Student pays for fees and books.

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