

# INDUSTRIAL MECHANICS

ASSOCIATE OF APPLIED SCIENCE — MECHATRONICS TECHNOLOGY DEGREE

## CAREER PATHS

MAINTENANCE TECHNICIAN  
PLC TECHNICIAN  
FACILITY MAINTENANCE TECHNICIAN

## SALARY

\$64,790\*  
MEDIAN ANNUAL INCOME

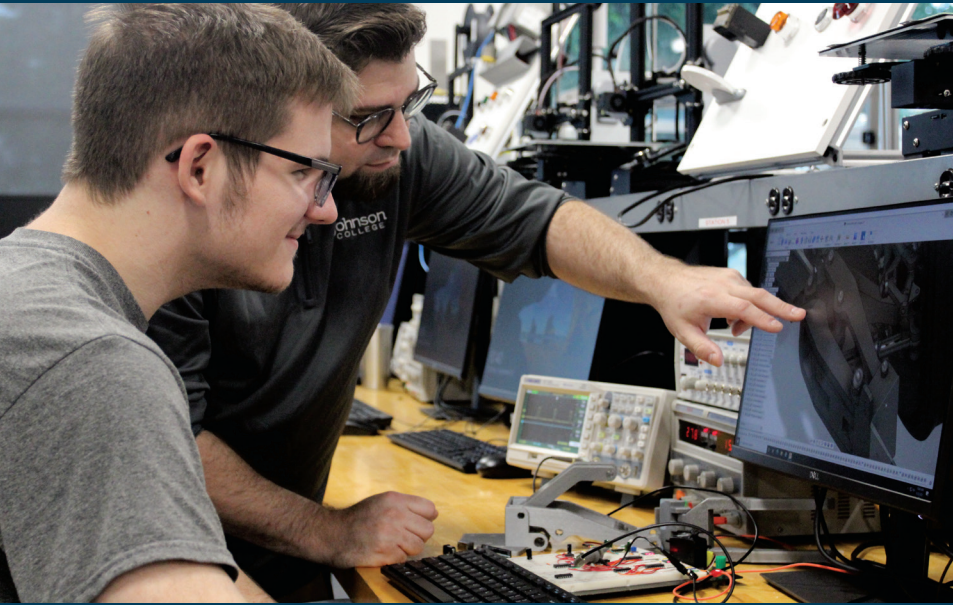
## JOB GROWTH

2%\* 2024-2034



# INDUSTRIAL MECHANICS

ASSOCIATE OF APPLIED SCIENCE —  
MECHATRONICS TECHNOLOGY DEGREE



## PROGRAM OBJECTIVE

The Industrial Mechanics concentration in the Mechatronics Technology program prepares graduates for entry-level industrial maintenance roles by developing skills in mechanical power transmission, alignment and installation, bearings and lubrication, hydraulics/pneumatics, and electrical drive systems. Emphasis is on safe diagnosis, repair, and preventive/predictive maintenance practices with accurate documentation and work management tools.

## READY. SET. WORK.

- Goal 1:** Graduates will possess the skills needed to obtain an entry-level technician position in the mechatronics field.
- Goal 2:** Graduates will be able to troubleshoot electrical, electronic, and mechanical systems using theoretical principles and measured values to resolve operational issues.
- Goal 3:** Graduates will be able to wire, configure, and verify motors, starters, and VFDs. Interface sensors and actuators with PLC I/O to achieve reliable machine operation.
- Goal 4:** Graduates will be able to install, align, and commission mechanical and pneumatic systems to specified tolerances.

Applicants are encouraged to arrange a campus visit and a personal information session with a Recruitment Advisor. Appointments may also be made to meet with appropriate faculty and current students.

## CAREER OPPORTUNITIES

Industrial mechanics technicians are employed in diverse settings such as metals, paper/wood products, plastics, utilities, and large distribution centers. They frequently work on the plant floor and in maintenance shops, installing and aligning mechanical drives, servicing pneumatics/hydraulics, and restoring equipment to reliable operation.



**SCRANTON CAMPUS**  
3427 NORTH MAIN AVENUE  
SCRANTON, PA 18508

**HAZLETON CAMPUS**  
370 MAPLEWOOD DRIVE  
HAZLE TOWNSHIP, PA 18202

Courses are subject to change. Please check [johnson.edu](http://johnson.edu) for up-to-date course info.

[Johnson.edu](http://Johnson.edu)

## PROGRAM COURSES

CREDITS

### TERM 1

Computer Aided Design	3
Introduction to Electronic Equipment	1
DC Electricity and Instrumentation	2
DC Electricity and Instrumentation Lab	1
Alternating Current and Passive Devices	2
Alternating Current and Passive Devices Lab	1
Project Management	2
Assembly Fundamentals	3

### TERM 2

Industry Communication	3
Humanities Elective	3
Trigonometry	3
Additive Manufacturing	1
Additive Manufacturing Lab	2
Sensors and Systems in Automation	2
Sensors and Systems in Automation Lab	1
Microcontrollers and Applications	1
Microcontrollers and Applications Lab	2

### TERM 3

Customer Service and Our World	3
Humanities Elective	3
Commercial Wiring	1
Commercial Wiring Lab	2
Programmable Logic Controllers for BTT	2
Programmable Logic Controllers for BTT Lab	2
Industry 4.0	1
Industry 4.0 Lab	3

### TERM 4

Network Architecture, Principles, & Protocols	2
Network Architecture, Principles, & Protocols Lab	1
Industrial Maintenance & Mechanics	2
Industrial Maintenance & Mechanics Lab	1
Production and Assembly	2
Production and Assembly Lab	3
Capstone Project/ Capstone Project Lab	4

**Minimum Credits to Graduate** 63

This term layout is based off of a fall start. Students who start in the spring will be required to attend an additional term to complete their degree.

There may be special admission requirements for this program. Please speak with a Recruitment Advisor by calling **570-702-8856** or visit our website [johnson.edu](http://johnson.edu) to review our requirements.