

# ADVANCED MANUFACTURING TECHNOLOGY

## CAREER PATHS

CNC TECHNICIAN AND OPERATOR  
MACHINIST (MILL AND LATHE)  
MECHANICAL ENGINEERING TECHNICIAN  
PARTS FABRICATOR TECHNICIAN

## SALARY

\$60,460\*  
2021 MEDIAN PAY

## JOB GROWTH

2021-2031: 2%\*



SCAN FOR YOUR FUTURE



# ADVANCED MANUFACTURING TECHNOLOGY



## PROGRAM OBJECTIVE

The two-year Advanced Manufacturing Technology Associates Degree program is designed to prepare students for the modern manufacturing environment of today. This program will prepare students for entry level positions within companies that have implemented team-oriented design, production, quality, and maintenance systems within the manufacturing environment. The technical courses provide the graduate with a solid foundation of advanced manufacturing procedures. The combination of the general education courses and technical courses equip the graduates with the communication, mathematics, and problem-solving skills necessary to perform in the modern workplace.

## READY. SET. WORK.

- Goal 1:** Graduates will possess the skills necessary to obtain entry-level technical positions in the manufacturing environment.
- 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 demonstrate the ability to communicate in a professional manner to determine the nature of a problem or to explain repairs.
- Goal 4:** Graduates will demonstrate the proper and safe use of hand tools, measuring equipment and test equipment used during manufacturing or troubleshooting.
- Goal 5:** Graduates will possess the skills necessary to correctly and safely operate machines used in the production of mechanical parts.

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

American manufacturers are becoming increasingly dependent upon the use of high-tech equipment that involves multiple, integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot, and maintain this high-tech equipment.

## PROGRAM COURSES

CREDITS

### SEMESTER 1

Fundamentals of Metal Cutting	2
Fundamentals of Metal Cutting Lab	1
Blueprint / Schematic Reading	3
Shielded Metal Arc Welding	2
Shielded Metal Arc Welding Lab	4
College Algebra I and Trigonometry	3
Fundamentals of Electricity	2
Fundamentals of Electricity Lab	1
First-Year Experience	1

### SEMESTER 2

Subtractive Manufacturing Lathe Work	1
Subtractive Manufacturing Lathe Work Lab	2
Subtractive Manufacturing Milling Work	1
Subtractive Manufacturing Milling Work Lab	2
Sensors and Systems in Automation	2
Sensors and Systems in Automation Lab	1
Microcomputer I	3
English Composition I	3
Public Speaking	3

### SEMESTER 3

Computer Numerical Control Machining Lathe	1
Computer Numerical Control Machining Lathe Lab	2
Computer Numerical Control Machining Milling	1
Computer Numerical Control Machining Milling Lab	2
Programmable Logic Controllers	2
Programmable Logic Controllers Lab	2
Introduction to Business	3
Introduction to Statistics	3

### SEMESTER 4

Computer Aided Design/ Computer Aided Manufacturing	2
Computer Aided Design/ Computer Aided Man. Lab	1
Introductory Physics	3
Manufacturing Management	1
Manufacturing Management Lab or Internship	3
Total Quality Management	4
	3

**MINIMUM CREDITS TO GRADUATE 66**

This semester layout is based off of a fall start. Students who start in the spring will be required to attend an additional semester 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** to review our requirements.