

MANUFACTURING TECHNOLOGY

(CIP 15.0613)

Associate of Applied Science

The Manufacturing Technology AAS degree program is designed to prepare students for a career as an engineering technician in a variety of industries. The program provides a core of knowledge and skills related to installation and maintenance of automated manufacturing machines, production lines, and security systems. Students may obtain only one AAS degree in one of three specialty areas: Mechanical Technician, Electrical Technician, or Instrumentation & Control Technician. Students enrolled in the AAS degree have manufacturing core coursework during the first two semesters and must then select a specialty track to complete the final two semesters of the program to complete the AAS degree. Classes offered in the Mechanical Technician Certificate may be applied toward the AAS degree in Manufacturing Technology.

TRACK A: Mechanical Technician Specialty

The Mechanical Technician curriculum includes Computer Numeric Controlled (NCN) Machining, Shielded Arc Welding, and Inspection Systems. Graduates are prepared for entry-level work as technicians in the maintenance and repair of mechanical equipment and processes.

College Readiness Courses (if needed)

Semester I

INMT 1305	Introduction to Industrial Maintenance
INMT 2303	Pumps, Compressors, and Mechanical Drives
CETT 1409	DC-AC Circuits
INTC 1350	Digital Measurement and Controls
MATH 1314	College Algebra or
MATH 2412	Pre-Calculus Math

Semester II

HYDR 1450	Hydraulics, Fabrication and Repair
PTAC 1432	Process Instrumentation I
INMT 1491	Special Topics in Manufacturing Technology/Technician
SPCH 1315	Public Speaking

Semester III

WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)
QCTC 1446	Testing and Inspection Systems
ENGL 1301	Composition I
CHEM 1405	Introductory Chemistry I or
CHEM 1411	General Chemistry I

Semester IV

MCHN 2403	Fundamentals of Computer Numerical Controlled (CNC) Machine Controls (Capstone Course)
Social/Behavioral Sciences from the AAS General Education Course List	
Humanities/Fine Arts from the AAS General Education Course List	
Discipline Related Studies Elective*	

*Discipline Related Studies Electives

Choose one from the following:

- PHYS 1401 – College Physics I
- MATH 2413 – Calculus I
- INTC 1457 – AC/DC Motor Control
- ELMT 2437 – Electronic Troubleshooting, Service, and Repair (Offered Fall only)
- INMT 1480 – Cooperative Education – Manufacturing Technology/Technician (Requires Program Director Approval)

Total Semester Hours – 60