

Associate of Applied Science Degree Engineering Technologies

Computer Integrated Manufacturing Technology

Maintenance and Repair Concentration (9439)

The Maintenance and Repair Concentration prepares graduates for repairing and maintaining equipment in an industrial environment. This degree is designed to meet AWT employment needs throughout the Alliance in Northeast Ohio.

NOTE: Students with limited shop experience or training will benefit by first completing CIMN 0950 Introduction to Machine-Tool Technology, CIMN 0980 Manufacturing Shop Mathematics, and CIMN 0990 Basic Blueprint Reading and Sketching.

First Semester:

CADT 1100	Introduction to AutoCAD	3
CIMN 1110	Machining Processes.	3
ENGL 1110*	English Composition I (A)	3
OR		
ENGL 1111	English Composition I (B)	
ENGR 1000	Introduction to Engineering Technology	2
MATH 1001	Introduction to Technical Mathematics	4
SPCH 1050**	Fundamentals of Public Speaking	2
OR		
SPCH 1150	Fundamentals of Interpersonal Communication	

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Second Semester:

CIMN 1210	Materials Processing	3
MATH 1101	Technical Mathematics I.	4
MECT 1150	Technical Communications	3
MECT 1600	Geometric Dimensioning and Tolerancing	2
PHYS 1100	Applied Physics I	3
Choose course(s) from the Arts and Humanities Electives list.		3

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Third Semester:

CIMN 2190	Manufacturing Methods and Costs	3
CIMN 2240	Jig and Fixture Design I	3
ELEC 1100	Direct Current Circuit Analysis	3
PHYS 1200	Applied Physics II	3
Choose course(s) from the Technical Electives list***		2

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Fourth Semester:

CIMN 2390	Fluid Power Technology.	3
CIMN 2875	Design and Manufacturing Capstone.	3
MECT 2500	Electromechanics	2
QENT 1200	Quality Concepts and Techniques	2
Choose course(s) from the Social and Behavioral Sciences Electives list		3
Choose course(s) from the Technical Electives list***		3

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Program Total: 65

2800.

Technical Electives: minimum 5 credits

BUSM 1800	Essentials of Management and Supervision	3
CADT 1500	Advanced AutoCAD	3
CADT 2100	Introduction to SolidWorks.	3
CADT 2500	Advanced SolidWorks	3
CIMN 1420	Computer Numerical Control Part Programming (CNC)	2
CIMN 1430	Introduction to Computer Assisted Part Programming.	2
CIMN 1450	Programming CNC Lathes.	2
CIMN 1460	Programming CNC Machining Centers	2
CIMN 2450	Oxyfuel Gas Welding	2
CIMN 2550	Stick Welding.	2
CIMN 2610	Automation and Robotics	3
CIMN 2660	MIG, TIG and Flux-Cored Arc Welding	3
CNET 1100	Cisco Networking Technology I	2
CNET 1200	Cisco Networking Technology II	2
CNET 1300	Cisco Networking Technology III	2
CPET 1120	C Programming for Engineering Technology	3
ENGR 2800	Engineering Co-Op Experience	1-3

Arts and Humanities Electives: minimum 3 credits

ARTS 1120, 2220, 2230; ENGL 2250, 2260, 2280, 2290; HUMX 1100, 1200; MUSC 1200, 1215, 1800, 2200, 2250; PHIL 1500, 2000

Social and Behavioral Sciences Electives: minimum 3 credits

ANTH 1160; ECON 1150, 2500, 2600; GEOG 1500, 1600, 2500; HIST 1100, 1200, 2100, 2200, 2400; POLS 1300, 2500; PSYC 1500; SOCY 1150

*English course selection is based on placement test results (ENGL 1111 is 4 credits, only 3 credits apply to the degree).

**Students may substitute either SPCH 1000 or SPCH 1100. One of these 3 credit courses may be required for students transferring to a four-year college.

***Students who want to fulfill the AWT requirement should take ENGR