

Advanced Manufacturing Technology Program

Program

Advanced Manufacturing Technology

Degree Type

AAS Degree

Location

All Locations

The Advanced Manufacturing Technology (ADM) Apprenticeship is a combination of cutting-edge curriculum with a paid technical co-op/internship with a reputable manufacturing industry. The advanced manufacturing technology courses along with the technical co-operative leads to a two-year Associate of Applied Science degree in Advanced Manufacturing Technology. At Beville State Community College industry/students have four options of focus after completing the MSSC Advanced Manufacturing Core Requirements.

These options include: Option 1 – Advanced Manufacturing Automation, Option 2 - Advanced Manufacturing Industrial Maintenance, Option 3 - Advanced Manufacturing Machine Tool Technology and Option 4 - Advanced Manufacturing Welding Technology.

Orientation

Item #	Title	Credits
ORI 107	STUDENT SURVIVAL SKILLS	1

General Education Core Requirements

Item #	Title	Credits
ENG 101	ENGLISH COMPOSITION I	3
	MTH 116 or Higher	3
	Natural Science/Math Elective	3-4
	History or Social/Behavioral Science Elective	3
	Humanities/Fine Arts Elective	3

MSSC Advanced Manufacturing Core Requirements

Item #	Title	Credits
ADM 291	MSSC SAFETY COURSE	3
ADM 292	MSSC QUALITY PRACTICES AND MEASUREMENT COURSE	3
ADM 293	MSSC MANUFACTURING PROCESSES AND PRODUCTION COURSE	3
ADM 294	MSSC MAINTENANCE AWARENESS COURSE	3

Technical Co-Operative Education

Item #	Title	Credits
ADM 150	TECHNICAL COOPERATIVE EDUCATION	1
ADM 151	TECHNICAL COOPERATIVE EDUCATION	1
ADM 152	TECHNICAL COOPERATIVE EDUCATION	1
ADM 153	TECHNICAL COOPERATIVE EDUCATION	1
ADM 154	TECHNICAL COOPERATIVE EDUCATION	1

CHOOSE ONE OPTION

Advanced Manufacturing Automation Option

Item #	Title	Credits
ETC 101	DC FUNDAMENTALS	3
ETC 102	AC FUNDAMENTALS	3
ETC 104	DIGITAL FUNDAMENTALS	3
ETC 108	MOTOR CONTROLS I	3
ELT 212	MOTOR CONTROL II	3
INT 184	INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS	3
ILT 196	ADVANCED PROGRAMMABLE LOGIC CONTROLLERS	3
INT 117	PRINCIPLES OF INDUSTRIAL MECHANICS	3
AUT 139	INTRO TO ROBOTIC PROGRAMMING	3

Advanced Manufacturing Industrial Maintenance Option

Item #	Title	Credits
ETC 101	DC FUNDAMENTALS	3
ETC 102	AC FUNDAMENTALS	3
ETC 108	MOTOR CONTROLS I	3
ELT 212	MOTOR CONTROL II	3
INT 184	INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS	3
ILT 196	ADVANCED PROGRAMMABLE LOGIC CONTROLLERS	3
ELT 118	COMMERCIAL/INDUSTRIAL WIRING	3
INT 117	PRINCIPLES OF INDUSTRIAL MECHANICS	3
INT 118	FUNDAMENTALS OF INDUSTRIAL HYDRAULICS AND PNEUMATICS	3

Advanced Manufacturing Machine Tool Technology Option

Item #	Title	Credits
MTT 100	MACHINING TECHNOLOGY I	6
MTT 103	MACHINING TECHNOLOGY II	6
MTT 121	BASIC PRINT READING FOR MACHINISTS	3
MTT 127	INTRODUCTION TO METROLOGY	3
MTT 136	MILLING OPERATIONS	6
CNC 139	BASIC COMPUTER NUMERICAL CONTROL	3

Advanced Manufacturing Welding Technology Option

Item #	Title	Credits
WDT 109	SMAW FILLET/PAC/CAC	3
WDT 110	INDUSTRIAL BLUE PRINT READING	3
WDT 123	SMAW FILLET/PAC/CAC LAB	3
WDT 119	GAS METAL ARC/FLUX CORED ARC WELDING	3
WDT 120	SHIELDED METAL ARC WELDING GROOVE	3
WDT 124	GAS METAL ARC/FLUX CORED ARC WELDING LAB	3
WDT 125	SHIELDED METAL ARC WELDING GROOVE LAB	3
WDT 218	CERTIFICATION	3
WDT 258	CERTIFICATION LAB	3
Total Credits		60