

MANUFACTURING TECHNOLOGY

Associate of Applied Science (AAS) Degree

100 credits

DEGREE AS AWARDED ON TRANSCRIPT

Associate of Applied Science, Manufacturing Technology

PROGRAM DESCRIPTION

The Manufacturing Technology Associate of Applied Science (AAS) degree program is a self-directed, outcome-based program designed to prepare students for technician-level employment in a variety of manufacturing environments. The program is offered exclusively at the Manufacturing and Applied Technology Center (MATC) at COCC's Redmond Campus. Department approval is required for enrollment at the Manufacturing and Applied Technology Center.

PROGRAM REQUIREMENTS**SUPPORT COURSES**

BA 285	Business Human Relations	3
or PSY 101	Applied Psychology	
or SP 218	Interpersonal Communication	
CIS 070	Introduction to Computers: Windows	2
(or higher)		
CIS 120	Computer Concepts	4
(or higher)		
HHP 252A	Fitness/First Aid	3
MFG 280	CWE Manufacturing	3
MTH 085	Technical Math I	4
(or higher)		
SP 219	Small Group Communication	4
SP 250	Listening	1
or SP 252	Team Skills	
or SP 253	Conflict Management	
WR 060	Rhetoric and Critical Thinking I	4
(or higher)		

CORE REQUIREMENTS

MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Welding Technology I	3
MFG 105	Welding Technology II	3
MFG 107	Welding Technology III	3
MFG 109	Lean Practices	2
MFG 110	Manufacturing Processes I	3
MFG 112	Manufacturing Processes II	3
MFG 114	Manufacturing Processes III	3
MFG 115	Design Processes I	2
MFG 116	Manufacturing Electrical Systems	2
MFG 118	Fluid Power Systems	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2

MANUFACTURING ELECTIVES

Students must choose at least 38 credits from the following program electives:

CIS 135S1	Solidworks 1	4
MFG 102	Blueprint Reading Sheet Metal	2
MFG 201	Benchwork	2
MFG 202	Metals Preparation	2
MFG 203	Layout	2
MFG 205	Drill Press	2
MFG 210	Vertical Milling	2
MFG 211	CNC Mill Operator	2
MFG 213	CNC Lathe Operator	2
MFG 214	Lathe Operator I	2
MFG 216	Lathe Operator II	2
MFG 230	CNC Programming Mill	2
MFG 232	CNC Programming Lathe	2

MFG 234	CAD/CAM Mill	2
MFG 236	CAD/CAM Lathe	2
MFG 238	Optical Comparator	1
MFG 239	Coordinate Measuring Machine	1
MFG 241	Electric Motor Control	2
MFG 242	Programmable Logic Controllers I	2
MFG 243	Industrial Sensors	2
MFG 244	Programmable Logic Controllers II	2
MFG 245	Electrical Controls/Fluid Power	2
MFG 246	Mechanical Troubleshooting	2
MFG 250	Additive Manufacturing	2
MFG 254	Manufacturing Jigs and Fixtures	2
MFG 262	Welding Inspection/Quality Control	2
MFG 264	Automated Welding/Cutting	2
MFG 266	Manufacturing Cost Estimating	2
MFG 267	Oxygen Fuel & Plasma Cutting	2
MFG 271	SMAW I	2
MFG 272	GMAW I	2
MFG 273	SMAW II	2
MFG 274	GMAW II	2
MFG 275	SMAW III	2
MFG 276	GMAW III	2
MFG 281	GTAW I	2
MFG 282	FCAW I	2
MFG 283	GTAW II	2
MFG 284	FCAW II	2
MFG 285	GTAW III	2
MFG 286	FCAW II	2
MFG 287	CNC Press Brake/Shearing	3
MFG 288	Industrial Fabrication	3
MFG 289	Material Handling-Fork Lift Safety	1
MFG 290	Certification Test Prep AWS I	1
MFG 291	Certification Test Prep NIMS I	1
MFG 292	Certification Test Prep AWS II	1
MFG 293	Certification Test Prep NIMS II	1
MFG 294	Certification Test Prep AWS III	1
MFG 295	Certification Test Prep NIMS III	1
MFG 296	Certification Test Prep SME	1
MFG 297	Certification Test Prep NAIT	1

TOTAL: 100 CREDITS