

## MANUFACTURING TECHNOLOGY

### Manufacturing Technology Associate of Applied Science

#### PROGRAM DESCRIPTION

The Manufacturing Technology Associate of Applied Science (AAS) degree and the two certificates of completion are designed to prepare students for technician-level employment in a variety of manufacturing environments.

**PROGRAM COSTS**

(beyond standard tuition/fees and textbooks)

**Material Costs**

- Welding personal protective equipment and tools, approximately \$400

**Enrollment Fees**

- Fees on specific MFG courses (estimated \$1100 total)

**PROGRAM ENTRANCE REQUIREMENTS**

**Academic Entrance Requirements**

- Recommended:
  - High School Diploma or GED
  - Minimum placement scores resulting in MTH 020 Pre-Algebra placement or prior completion of MTH 010 Developmental Mathematics or higher ("C" or higher)
  - Successful completion of or current enrollment in MATC new-student orientation class MFG 100 MATC Orientation.
  - Recommended completion of CIS 070 Intro to Computers: Windows or equivalent skills

**PROGRAM PERFORMANCE STANDARDS**

**Academic Requirements**

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

**PROGRAM COURSE REQUIREMENTS**

**Core Requirements<sup>1</sup>**

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 I	2
MFG 133	Quality Assurance	3
MFG 160	Materials Engineering	2

**Manufacturing Electives<sup>1</sup>**

Choose 38 elective credits from the list below: 38

Recommend: CIS 135S1, MFG 102, MFG 201, MFG 202, MFG 203, MFG 205, MFG 210, MFG 211, MFG 213, MFG 214, MFG 216, MFG 230, MFG 232, MFG 234, MFG 236, MFG 238, MFG 239, MFG 241, MFG 242, MFG 243, MFG 244, MFG 245, MFG 246, MFG 250, MFG 254, MFG 262, MFG 264, MFG 266, MFG 267, MFG 271, MFG 272, MFG 273, MFG 274, MFG 275, MFG 276, MFG 281, MFG 282, MFG 283, MFG 284, MFG 285, MFG 286, MFG 287, MFG 288, MFG 289, MFG 290, MFG 291

MFG 280	CWE Manufacturing	3
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**Other Requirements**

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

**Total Credits 100**

<sup>1</sup> Most manufacturing courses carry a \$25-\$75 fee to cover software or lab materials (see class schedule for individual courses and fees).

**ADVISING NOTES**

Nearly all MATC courses are self-directed, outcome-based curricula. This provides students with a greater degree of flexibility than most other COCC programs. The MATC hours of operation provide students with ample time to complete their coursework during a term.

Upon starting their program, students review their desired certificate or degree outcome with their advisor and a sequence of coursework is identified for them. With the exception of classes in a series (e.g. Manufacturing Processes I, II, III) or those with specific prerequisites (as identified in the catalog) most classes can be taken in any order, provided that instructor permission is obtained.

This certificate is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions. Prior to starting any MATC program, students are advised to contact the institution to which they intend to transfer and identify what credits may be transferable.