

Planning to achieve a Manual Machining Certificate at the MATC

To achieve an One Year Manual Machining Certificate requires 42 credits (Effective 2011 Catalog).

- If you are pursuing this certificate within the AAS in Manufacturing Technology, many of your Manual Machining Certificate courses will be part of your first year courses. The remainder will be scheduled as part of your electives.
- If you are pursuing only the Manual Machining Certificate, you can expect this to program to require 4 terms to complete. Depending on your math placement, you can expect to take between 4 and 16 credit hours per term completing this program
- Transitional math courses (MTH 10,20,60) do not count towards certificate requirements and must be added to the 42 credit count.

This document provides a suggested course sequence, listed term-by-term to illustrate how this program can be completed in 4 terms. Use this document as a general planning tool as you build your individual plan.

Now realistically, you may face challenges to making this sequence happen in 4 terms. You may have financial constraints, job and family obligations or you just don't feel comfortable taking that high a class load per term. By slipping courses from one term to another you can reduce your term-by-term workload. There's nothing wrong with that except that it means you will need to plan on spending more time (and possibly money) earning your degree. That is the tradeoff you must make.

Keep in mind when planning, you should always consult with your financial aid advisor to determine if there are any restrictions or other issues related to your credit loads per term or total time to get your degree.

The suggested sequence assumes a Fall Term start. If you start in Winter or Spring terms, your sequence will still generally be the same. However you may have to make some adjustments in your plan based on where the summer term falls in your plan and when some of the non-MATC courses that may not be available every term are offered.

Based on experience, we have included a math class in the each term as most students in this program start in developmental math courses that should be taken prior to taking MTH 85 which is required for the certificate. If you have higher placements, you may wish to explore other MATC electives if you would like a higher credit load.

Suggested Course Sequence plan for 1 Year Manual Machining Certificate

42 Total Credits Required

Term 1

Class Number	Description	Credits
MFG 100	MATC Orientation	1
MFG 101	Blueprint Reading	2
MFG 103	Weld Technology I	3
MFG 110	Manufacturing Processes I	3
MFG 202	Metals Preparation	2
MTH Class	Math Class- MTH 010,020,060 or 085 (depending on placement scores and class availability)	4
Total		15

Term 2

Class Number	Description	Credits
MFG 112	Manufacturing Processes II	3
MFG 115	Design Processes I	2
MFG 133	Quality Assurance	3
WR 60	Rhetoric and Critical Thinking	4
MTH Class	Math Class- MTH 020,060 or 085 (depending on placement scores and class availability)	4
Total		12-16

Term 3

Class Number	Description	Credits
MFG 114	Manufacturing Processes III	3
MFG 203	Layout	2
MFG 205	Drill Press	2
MFG 210	Vertical Milling	2
MFG 214	Lathe Operator I	2
MTH Class	Math Class- MTH 060 or 085 (depending on placement scores and class availability)	4
Total		11-15

Term 4

Class Number	Description	Credits
MFG 216	Lathe Operator II	2
CIS 70	Introduction to Computers: Windows (or higher)	2
MTH 085	Technical Math (If not taken yet)	4
Total		4-8