



2016-2017 PETITION/PROGRAM SHEET
Award: Technical Certificate
Program of Study: Manufacturing Technology
Specialization: Machine and Manufacturing Trades

About This Certificate . . .

This program offers classroom instruction and related lab work with hands-on activities in the use of tools and the operation of equipment found in manufacturing. Students will work in the areas of blueprint reading, computer numerical control (CNC) machining, general machining and maintenance, computer-aided drafting (CAD), and related mathematics. This course is designed to meet competency-based standards set by the industry. Attitude and quality of workmanship is stressed. Career options include entry level machinist, computer-numerical control operator, numerical tool and process technician, manufacturing engineering technician, and manufacturing inspection technician.

For more information on what you can do with this major, go to <http://www.coloradomesa.edu/wccc/programs.html>

All CMU certificate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Use written and oral communication skills needed for entry level employment in the manufacturing industry. (Communication Fluency)
2. Apply mathematical concepts to perform machining tasks. (Quantitative Fluency)
3. Distinguish between tolerances and dimensions, as used in the machining industry. (Critical Thinking)
4. Summarize business practices, principles and application of associated technical skill in the machining in industry. (Specialized Knowledge)
5. Apply the necessary machining skill sets to perform specified manufacturing processes. (Applied Learning)
6. Determine ethical and civil responsibility necessary for employees in the machining industry. (Specialized Knowledge)

NAME: _____ **STUDENT ID #:** _____

LOCAL ADDRESS AND PHONE NUMBER: _____
 _____ () _____

I, (Signature) _____, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I have read and understand the policies listed on the last page of this program sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

 Signature of Advisor Date _____ 20____

 Signature of Department Head Date _____ 20____

 Signature of Registrar Date _____ 20____

DEGREE REQUIREMENTS:

- 2.00 cumulative GPA or higher in all CMU coursework
- “C” or better in each course which comprises the area of emphasis or specialization.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- A student must follow the CMU graduation requirements either from 1) the program sheet for the major in effect at the time the student officially declares a major; or 2) a program sheet for the major approved for a year subsequent to the year during which the student officially declares the major and is approved for the student by the department head. Because a program may have requirements specific to the degree, the student should check with the faculty advisor for additional criteria. It is the student’s responsibility to be aware of, and follow, all requirements for the degree being pursued. Any exceptions or substitutions must be approved by the student’s faculty advisor and Department Head.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for additional graduation information.

Technical Certificate: Manufacturing Technology – Machine and Manufacturing Trades (37 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is on the Essential Learning list of options and a requirement for your major, you must use it to fulfill the major requirement and make a different selection within the Essential Learning requirement.

Course No	Title	Sem.hrs	Grade	Term/Trns
MAMT 105	Print Reading/Sketching	2	_____	_____
MAMT 106	Geometric Tolerance	2	_____	_____
MAMT 115	Introduction to Machine Shop	3	_____	_____

Course No	Title	Sem.hrs	Grade	Term/Trns
MAMT 120	Machine Technology I	4	_____	_____
MAMT 125	Machine Technology II	4	_____	_____
MAMT 230	Machine Technology III	4	_____	_____
MAMT 240	Job Shop Machining II	3	_____	_____
OR				
MAMT 170	Practical Applications	3	_____	_____
MAMT 148	CNC Applications	3	_____	_____
MAMT 251	CNC Machining I	3	_____	_____
MAMT 255	CNC Machining II	3	_____	_____
MAMT 260	Properties of Materials	3	_____	_____
MATH 107	Career Mathematics	3	_____	_____

**SUGGESTED COURSE SEQUENCING FOR THE
TECHNICAL CERTIFICATE WITH A
PROGRAM OF STUDY IN MANUFACTURING TECHNOLOGY,
SPECIALIZATION IN MACHINE AND MANUFACTURING TRADES**

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student’s responsibility to meet with the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

First Semester			Hours	Second Semester			Hours
MATH 107	Career Mathematics	3	3	MAMT 230	Machine Technology III	4	4
MAMT 105	Print Reading/Sketching	2	2	MAMT 251	CNC Machining I	3	3
MAMT 115	Introduction to Machine Shop	3	3	MAMT 255	CNC Machining II	3	3
MAMT 120	Machine Technology I	4	4	MAMT 240	Job Shop Machining II OR		
MAMT 125	Machine Technology II	4	4	MAMT 170	Practical Application	3	3
MAMT 148	CNC Applications	3	3	MAMT 260	Properties of Materials	3	3
			19	MAMT 106	Geometric Tolerancing	2	2
							18

POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. This program sheet must be submitted with your graduation planning sheet to your advisor during the **semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.** You must turn in your “Intent to Graduate” form to the Registrar’s Office **by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December.**
3. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar’s Office. (Students cannot handle the forms once the advisor signs.)
4. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.
5. NOTE: During your senior year, you will be required to take a capstone exit assessment/project (e.g., Major Field Achievement Test).