



2013-2014 PETITION/PROGRAM SHEET

Degree: Associate of Applied Science
Major: Manufacturing Technology
Emphasis: Machining Technology

About This Degree . . .

The Associate of Applied Science with the Manufacturing Technology major offers classroom instruction and related lab work with hands-on activities in the use of tools and the operation of equipment found in manufacturing. In the Machining Technology emphasis students learn to apply industrial knowledge and skills to plan and implement designs, operate manual mills and lathes, operate computer-aided machinery with CAD/CAM software, and computer-numerical controlled (CNC) machines. Students also develop the skills that enable them to read blueprints, apply appropriate mathematical concepts, and understand the properties of metal and polymers. This course of study is designed to meet competency-based standards set by the manufacturing industry. With this degree, student will be qualified for the following employment opportunities: 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

POLICIES:

- 1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the catalog for a complete list of graduation requirements.
2. 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. 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.
4. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature.
5. Finally, the Department Head or the department administrative assistant will take the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
6. 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.
7. NOTE: The semester before graduation, you may be required to take a Major Field Achievement Test (exit exam).

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 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__

Students should work closely with a faculty advisor when selecting and scheduling courses prior to registration.

Degree Requirements:

- 69 semester hours total (A minimum of 16 taken at CMU in no fewer than two semesters)
- 2.00 cumulative GPA or higher in all CMU coursework and a “C” or better must be achieved in coursework toward major content area.
- 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.
- When filling out the program sheet a course can be used only once.
- See the “Undergraduate Graduation Requirements” in the catalog for additional graduation information.

GENERAL EDUCATION REQUIREMENTS (Minimum 15 semester hours) See the current catalog for a list of courses that fulfill the requirements below. If a course is on the general education 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 general education requirement.

| Course No | Title | Sem.hrs | Grade | Term/Trns |
|---|---------------------------------------|---------|-------|-----------|
| Communication (6 semester hours) | | | | |
| ENGL 111 | English Composition | 3 | _____ | _____ |
| ENGL 112 | English Composition | 3 | _____ | _____ |
| -OR- | | | | |
| ENGL 111 | English Composition <u>and</u> | 3 | _____ | _____ |
| SPCH 101 | Interpersonal Communication <u>or</u> | 3 | _____ | _____ |
| SPCH 102 | Speechmaking | 3 | _____ | _____ |

Mathematics: Minimum Math 107 Career Mathematics (Minimum 3 semester hours)

| | | | | |
|-------|-------|---|-------|-------|
| _____ | _____ | 3 | _____ | _____ |
|-------|-------|---|-------|-------|

Social Sciences, Natural Science, Fine Arts or Humanities or Selected Applied Studies Courses* (Minimum 6 semester hours)

| | | | | |
|-----------|-------|---------|-------|-----------|
| _____ | _____ | 3 | _____ | _____ |
| Course No | Title | Sem.hrs | Grade | Term/Trns |
| _____ | _____ | 3 | _____ | _____ |

OTHER LOWER DIVISION REQUIREMENTS

Wellness (2 semester hours)

| | | | | |
|----------|---------------------|---|-------|-------|
| KINE 100 | Health and Wellness | 1 | _____ | _____ |
| KINA 1 | _____ | 1 | _____ | _____ |

ASSOCIATE OF APPLIED SCIENCE: MANUFACTURING TECHNOLOGY MACHINING TECHNOLOGY COURSE REQUIREMENTS

(52 semester hours)

Core Classes

| | | | | |
|----------|-------------------------------|---|-------|-------|
| CADT101 | Introduction to Computers | 1 | _____ | _____ |
| CADT 108 | CAD Mechanical | 3 | _____ | _____ |
| MAMT101 | Introduction to Manufacturing | 2 | _____ | _____ |
| MAMT105 | Print Reading/Sketching | 2 | _____ | _____ |
| MAMT106 | Geometric Tolerancing | 1 | _____ | _____ |
| MAMT115 | Introduction to Machine Shop | 3 | _____ | _____ |
| MAMT120 | Machine Technology I | 4 | _____ | _____ |
| MAMT125 | Machine Technology II | 4 | _____ | _____ |
| MAMT130 | Machine Technology III | 4 | _____ | _____ |
| MAMT140 | Job Shop Machining II | 3 | _____ | _____ |

OR

| | | | | |
|----------|--------------------------------|---|-------|-------|
| MAMT170 | Practical Applications | 3 | _____ | _____ |
| MAMT148 | CNC Applications | 3 | _____ | _____ |
| MAMT151 | Numerical Control Machining I | 3 | _____ | _____ |
| MAMT155 | Numerical Control Machining II | 3 | _____ | _____ |
| MAMT160 | Properties of Materials | 2 | _____ | _____ |
| MAMT207 | Intro to Statistical Processes | 2 | _____ | _____ |
| TSTG 220 | Industry Employment Practices | 3 | _____ | _____ |
| WELD151 | Introduction to Welding | 3 | _____ | _____ |
| PHYS100 | Concepts of Physics | 3 | _____ | _____ |

(or higher)

Electives: (3 semester hours)

| | | | | |
|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ |
|-------|-------|-------|-------|-------|

*Please see your advisor for requirements specific to this program.

SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF APPLIED SCIENCE WITH A MAJOR IN MANUFACTURING TECHNOLOGY, EMPHASIS IN MACHINING TECHNOLOGY

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 | Math for Technology or | MAMT 130 | Machine Technology II |
| MATH 113 | College Algebra | MAMT 151 | Numerical Control Machining I |
| MAMT 115 | Introduction to Machine Shop | MAMT 155 | Numerical Control Machining II |
| MAMT 120 | Machine Technology I | MAMT 140 | Job Shop Machining II or |
| MAMT 125 | Machine Technology II | MAMT 170 | Practical Application |
| MAMT 148 | CNC Applications | MAMT 160 | Properties of Materials |
| | <u>3</u> | MAMT 105 | Print Reading/Sketching |
| | 18 | MAMT 106 | Geometric Tolerancing |
| | | | <u>1</u> |
| | | | 18 |

| Third Semester | Hours | Fourth Semester | Hours |
|--|--------------------------------------|------------------------|-------------------------------|
| CADT 101 | Introduction to Computers | CADT 108 | CAD Mechanical |
| MAMT 101 | Introduction to Manufacturing | ENGL 112 | English Composition |
| General Education Soc/Beh Sci., Humanities, Speech | 6 | TSTG 220 | Industry Employment Practices |
| ENGL 111 | English Composition | WELD 151 | Introduction to Welding |
| MAMT 207 | Intro to Statistical Process Control | KINA 1__ | Activity |
| PHYS 100 | Concepts of Physics | Electives | <u>3</u> |
| (or higher) | | | 16 |
| KINE 100 | Health & Wellness | | |
| | <u>1</u> | | |
| | 18 | | |