



**2016-2017 PETITION/PROGRAM SHEET**  
**Award: Technical Certificate**  
**Program of Study: Manufacturing Technology**  
**Specialization: Computer Aided Design Technology**

**About This Certificate . . .**

Through the use of freehand sketching and Computer Aided Drafting (CAD), the student will learn the techniques of basic drafting principles and methods used in today's engineering fields. Drafting concepts and the processes of orthographic projection, pictorial drawing, dimensioning, and geometric construction will be explored by hand and with CAD software and equipment. The majority of the student's work will be completed on the computer. A project in the area of the student's interest will tie the course to real world concepts.

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. Apply principles of grammar and vocabulary in the documentation required to perform the duties of a CAD technician. (Communication Fluency)
2. Apply mathematical concepts and practices that are required to properly perform calculation for design. (Quantitative Fluency)
3. Interview clients, to help decide on materials, size and design, based on client's needs and students' knowledge of the industry. (Applied Learning)
4. Demonstrate mastery of terminology in the Engineering, Architectural, Civil and Technical drafting industry. (Specialized Knowledge)
5. Generate substantially error-free plans that define the duties of a CAD technician. Produce industry standard drawings in various platforms. (Critical Thinking)
6. Demonstrate personal and professional ethical behavior as applied to the Computer Aided Design 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 \_\_\_\_\_ 20\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Department Head \_\_\_\_\_ 20\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Registrar \_\_\_\_\_ 20\_\_\_\_\_  
Date

**DEGREE REQUIREMENTS:**

- 2.00 cumulative GPA or higher in all MSC 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 the “Requirements for Undergraduate Degrees and Certificates” in the Colorado Mesa University catalog for additional graduation information.

**Technical Certificate: Manufacturing Technology – Computer Aided Design Technology (35-36 Semester Hours)**

Course No	Title	Sem.hrs	Grade	Term/Trns
CADT 101	Introduction to Computers	1	_____	_____
CONC 104	Architect/Civil Print Reading	2	_____	_____
CADT 106	Computer Aided Design	3	_____	_____
CADT 107	Advanced Comp Aided Design	3	_____	_____
CADT 108	CAD – Mechanical	3	_____	_____
CADT 109	CAD – Mechanical Advanced	3	_____	_____

Course No	Title	Sem.hrs	Grade	Term/Trns
CADT 110	CAD – Application	4	_____	_____
CADT 210	Project	3	_____	_____
ENGL 111	English Composition	3	_____	_____
MAMT 105	Print Reading/Sketching	2	_____	_____
MAMT 106	Geometric Tolerancing	2	_____	_____
MATH 107	Career Mathematics (minimum) 3-4		_____	_____
	<b>OR</b> MATH 113 College Algebra		_____	_____
	Electives (with advisor’s approval, 3 semester hours)		_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

**SUGGESTED COURSE SEQUENCING FOR THE TECHNICAL CERTIFICATE WITH A PROGRAM OF STUDY IN MANUFACTURING TECHNOLOGY, SPECIALIZATION IN COMPUTER AIDED DESIGN 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.

<b>First Semester</b>			<b>Hours</b>	<b>Second Semester</b>			<b>Hours</b>
CADT 101	Introduction to Computers	1		CADT 107	Adv. Computer Aided Design	3	
CONC 104	Architectural/Civil Print Reading	2		CADT 109	CAD – Mechanical Advanced	3	
CADT 106	Computer Aided Design	3		CADT 110	CAD Application	4	
CADT 108	CAD – Mechanical	3		CADT 210	Project	3	
ENGL 111	English Composition	3		Electives (with advisor’s approval)		3	
MAMT 105	Print Reading/Sketching	2		MAMT 106	Geometric Tolerancing	<u>2</u>	
MATH 107	Career Mathematics <b>or</b>						18
MATH 113	College Algebra	<u>3-4</u>					
		17-18					

**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).