

2012-2013 PETITION/PROGRAM SHEET

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

About This Emphasis . . .

The Welding Technology Degree program is designed to provide training and the opportunity to become proficient at SMAW, GWAW, GTAW, FCAW, OAW, OAC, PAC, CAC-A on plate and SMAW on pipe. Students study welding, cutting, layout, fabrication, fluid power, pneumatics and technical math. Safety, attitude and quality of workmanship are stressed throughout this course. The welding AAS degree prepares students for advanced level placement in a wide range of jobs in the welding industry and is designed to meet competency based standards set by the American Welding Society.

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

POLICIES:

- 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 WCCC Director 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:	ME:STUDENT ID#			
LOCAL ADDRESS AND PHONE NUMBER:				
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on the Program Sheet. I further certify that the grade l	, hereby certify that I have completed (or will code for those courses is the final course grade received except emester. I have indicated the semester in which I will complete	for the courses in which I am		
		20		
Signature of Advisor	Date			
		20		
Signature of WCCC Director	Date			
		20		
Signature of Registrar	Date	20		

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

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- 64 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.
- 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
Communic	ation(6 semester hours)			
ENGL 111	English Composition	3		
ENGL 112	English Composition	3		
-OR-				
ENGL 111	English Composition and	3		
SPCH 101	Interpersonal Communication or	<u>r</u> 3		
SPCH 102	Speechmaking	3		
Math: Min semester ho	imum Math 107 Career Mathe	matics (N	/Iinimur	n 3
		_ 3		
	nces, Natural Science, Fine Artsoplied Studies Courses* (Minim	,		
		_ 3		
		_ 3		

Course No Title	Sem.hrs	Grade	Term/Trns
OTHER LOWER DIVISION REQURE	MENTS		
Wellness (2 semester hours)			
KINE 100 Health and Wellness	1		
KINA 1	1		

ASSOCIATE OF APPLIED SCIENCE: MANUFACTURING TECHNOLOGY – WELDING TECHNOLOGY COURSE REQUIREMENTS

(47 semester hours)

Core Classes			
CADT101	Introduction to Computers	1	
CADT108	Computer Aided Design	3	
MAMT105	Print Reading/Sketching	2	
MAMT101	Intro to Manufacturing	2	
MAMT115	Intro to Machine Shop	3	
MAMT150	Intro to Numerical Control	1	
MAMT160	Properties of Materials	2	
TSTG 150	Fluid Power	3	
TSTG 220	Industry Employment Practices	3	
OR			
TSTG 120	Industrial Safety Practices	3	
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WELD110	Shielded Metal Arc Welding	3	
WELD117	Oxy/Fuel & Plasma Cutting	3	
WELD133	Metal Fabrication Methods	3	
WELD144	Welding Business Operations	3	
WELD211	GMAW/FCAW	3	
WELD230	Gas Tungsten Arc Welding	3	
WELD 240	PIPE Welding	3	
WELD 270	Practical Applications	3	
Electives: (3 s	emester hours)		

TOTAL:64 Semester Hours

Students in Welding may be required to purchase approximately \$500.00 in tools and personal safety welding equipment. This does not include required textbooks. These costs may vary with student need and brand or quality of tools or equipment purchased. All safety glasses must meet the minimum industry safety standard of Z-87 with side shields. CMU / WCCC has lockers with required tools available for rent at \$50.00 per semester.

^{*}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 WELDING 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.

	Hours	Second Semes	ster	Hours
Introduction to Computers Intro to Manufacturing PrintReading/Sketching Shielded Metal Arc Welding Oxy/Fuel and Plasma Arc Cutting Metal Fabrication Methods	1 2 2 3 3	CADT 108 MAMT 160 MATH 107 MATH 113 WELD 211	Computer Aided Design- Mechanical Properties of Materials Career Mathematics OR College Algebra GMAW/FCAW	3 2 3 3 3 3
				<u>3</u>
	17 Hours	Fourth Semes	ster	17 Hours
English Composition Health and Wellness Activity Intro to Machine Shop Introduction to Numerical Control Fluid Power on Soc/Beh Sci., Humanities, Speech	3 1 1 3 1 3 2	ENGL 112 TSTG 220 TSTG120 WELD 270 General Educa Electives	English Composition Industry Employment Practices OR Industrial Safety Practice Practical Applications ation Soc/Beh Sci., Humanities, Speech	3 3 3 3 3 15
	Intro to Manufacturing PrintReading/Sketching Shielded Metal Arc Welding Oxy/Fuel and Plasma Arc Cutting Metal Fabrication Methods Welding Business Operations English Composition Health and Wellness Activity Intro to Machine Shop Introduction to Numerical Control	Introduction to Computers 1 Intro to Manufacturing 2 PrintReading/Sketching 2 Shielded Metal Arc Welding 3 Oxy/Fuel and Plasma Arc Cutting 3 Metal Fabrication Methods 3 Welding Business Operations 3 Hours English Composition 3 Health and Wellness 1 Activity 1 Intro to Machine Shop 3 Introduction to Numerical Control 1 Fluid Power 3	Introduction to Computers Intro to Manufacturing PrintReading/Sketching PrintReading/Sketching Shielded Metal Arc Welding Oxy/Fuel and Plasma Arc Cutting Metal Fabrication Methods Welding Business Operations IT Hours Hours Fourth Semester English Composition Health and Wellness Activity Intro to Machine Shop Introduction to Numerical Control Introduction to Numerical Control Fluid Power I MATH 107 MATH 113 WELD 211 WELD 211 WELD 230 WELD 230 WELD 240 Fourth Semester TSTG 220 Introduction to Numerical Control General Education Fluid Power Introduction to State of the American Control General Education Fluid Power Introduction to State of the American Capture of the American Control General Education Fluid Power Introduction to State of the American Capture	Introduction to Computers 1 CADT 108 Computer Aided Design-Mechanical Intro to Manufacturing 2 MAMT 160 Properties of Materials PrintReading/Sketching 2 MATH 107 Career Mathematics OR Shielded Metal Arc Welding 3 MATH 113 College Algebra Oxy/Fuel and Plasma Arc Cutting 3 WELD 211 GMAW/FCAW Metal Fabrication Methods 3 WELD 230 Gas TungstenArcWelding Welding Business Operations 3 WELD 240 PIPE Welding 17 Hours Fourth Semester English Composition 3 ENGL 112 English Composition Health and Wellness 1 TSTG 220 Industry Employment Practices OR Activity 1 TSTG120 Industrial Safety Practice Intro to Machine Shop 3 WELD 270 Practical Applications Introduction to Numerical Control 1 General Education Soc/Beh Sci., Humanities, Speech Fluid Power 3 Electives