# WESTERN COLORADO COMMUNITY COLLEGE

#### 2013-2014 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 <a href="http://www.coloradomesa.edu/wccc/programs.html">http://www.coloradomesa.edu/wccc/programs.html</a>

#### **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 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:	STUDENT ID #	_
LOCAL ADDRESS AND PHONE NUMBER:		
	( )	_
	, hereby certify that I have completed (or will ce listed for those courses is the final course grade received except text semester. I have indicated the semester in which I will complete	
		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	/Iinimui	m 3
		_ 3		
	nces, Natural Science, Fine Art oplied Studies Courses* (Minim	,		

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

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	<b>Industry Employment Practices</b>	3	 
OR			
TSTG 120	Industrial Safety Practices	3	 
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 se	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.

<sup>\*</sup>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.

First Semester		Hours	Second Semes	ster	Hours
CADT101	Introduction to Computers	1	CADT 108	Computer Aided Design- Mechanical	3
MAMT 101	Intro to Manufacturing	2	MAMT 160	Properties of Materials	2
<b>MAMT 105</b>	PrintReading/Sketching	2	MATH 107	Career Mathematics OR	
WELD 110	Shielded Metal Arc Welding	3	MATH 113	College Algebra	3
WELD 117	Oxy/Fuel and Plasma Arc Cutting	3	<b>WELD 211</b>	GMAW/FCAW	3
WELD 133	Metal Fabrication Methods	3	WELD 230	Gas TungstenArcWelding	3
WELD 144	Welding Business Operations	<u>3</u>	WELD 240	PIPE Welding	<u>3</u>
		17			17

Third Semester		Hours
ENGL 111	English Composition	3
KINE 100	Health and Wellness	1
KINA 1xx	Activity	1
MAMT 115	Intro to Machine Shop	3
MAMT 150	Introduction to Numerical Control	1
TSTG150	Fluid Power	3
General Education	Soc/Beh Sci., Humanities, Speech	<u>3</u>
		15

Fourth Semest	ter .	<b>Hours</b>
ENGL 112	English Composition or SPCH 101/102	2 3
TSTG 220	Industry Employment Practices OR	
TSTG120	Industrial Safety Practice	3
<b>WELD 270</b>	Practical Applications	3
General Educat	tion Soc/Beh Sci., Humanities, Speech	3
Electives		<u>3</u>
		15

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