



2005 – 06 PETITION/PROGRAM SHEET
Certificate: Manufacturing Technology – Welding Technology
www.mesastate.edu/schools/utec/manf.htm

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 manufacturing equipment. Students study welding and cutting, fluid power and pneumatics, robotics, properties of materials and basic electrical theory. This course is designed to meet competency-based standards set by the industry. Attitude and quality of workmanship is stressed.

POLICIES:

1. It is your responsibility to determine whether you have met the requirements for your degree. Please see the MSC 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 UTEC Director of Instruction for signature.
5. Finally, the UTEC Director of Instruction 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 UTEC Director of Instruction _____ Date _____ 20____

Signature of Registrar _____ Date _____ 20____

Certificate: Manufacturing Technology – Welding Technology (44 Semester Hours) Need a “C” or higher in all WELD courses.

<u>Course</u>	<u>No.</u>	<u>Credit</u>	<u>Grade</u>	<u>Term</u>	<u>Year</u>	<u>Trns/Subs</u>	<u>Course</u>	<u>No.</u>	<u>Credit</u>	<u>Grade</u>	<u>Term</u>	<u>Year</u>	<u>Trns/Subs</u>
CADT	<u>101</u>	<u>1</u>	_____	_____	_____	_____	WELD	<u>117L</u>	<u>1</u>	_____	_____	_____	_____
ENGL	<u>111</u>	<u>3</u>	_____	_____	_____	_____	WELD	<u>120</u>	<u>1</u>	_____	_____	_____	_____
MAMT	<u>105</u>	<u>2</u>	_____	_____	_____	_____	WELD	<u>120L</u>	<u>5</u>	_____	_____	_____	_____
MAMT	<u>160</u>	<u>1</u>	_____	_____	_____	_____	WELD	<u>133</u>	<u>3</u>	_____	_____	_____	_____
MAMT	<u>160L</u>	<u>1</u>	_____	_____	_____	_____	WELD	<u>140</u>	<u>3</u>	_____	_____	_____	_____
UTEC	<u>107</u>	<u>4</u>	_____	_____	_____	_____	or						
WELD	<u>110</u>	<u>1</u>	_____	_____	_____	_____	WELD	<u>170</u>	<u>3</u>	_____	_____	_____	_____
WELD	<u>110L</u>	<u>5</u>	_____	_____	_____	_____	WELD	<u>211</u>	<u>1</u>	_____	_____	_____	_____
WELD	<u>115</u>	<u>4</u>	_____	_____	_____	_____	WELD	<u>211L</u>	<u>4</u>	_____	_____	_____	_____
WELD	<u>117</u>	<u>1</u>	_____	_____	_____	_____	WELD	<u>221</u>	<u>1</u>	_____	_____	_____	_____
							WELD	<u>221L</u>	<u>2</u>	_____	_____	_____	_____

- A cumulative grade point average of 2.0 or higher must be maintained for all courses taken and a “C” or better must be achieved in each course which comprises the area of emphasis or specialization for WELD.
- It is recommended that students work closely with a faculty advisor when selecting appropriate courses and scheduling classes.

Certificate: Manufacturing Technology – Welding Technology Course Requirements (44 Semester Hours)

Required Courses:

CADT 101 Introduction to Computers
ENGL 111 English Composition
MAMT 105 Print Reading/Sketching
MAMT 160 Properties of Materials
MAMT 160L Properties of Materials Laboratory
UTEC 107 Math for Technology
WELD 110 SMAW I
WELD 110L SMAW I Laboratory
WELD 115 Welding and Structural Theory
WELD 117 OFW and C I
WELD 117L OFW and C I Laboratory
WELD 120 SMAW II
WELD 120L SMAW II Laboratory
WELD 133 Fabrication Layout
WELD 140 Job Shop **or** WELD 170 Practical Applications
WELD 211 GMAW
WELD 211L GMAW Laboratory
WELD 221 FCAW
WELD 221L FCAW Laboratory

- Students in Welding may be required to purchase approximately \$200.00 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.

**SUGGESTED COURSE SEQUENCING FOR THE
CERTIFICATE OF OCCUPATIONAL PROFICIENCY WITH AN EMPHASIS IN
MANUFACTURING TECHNOLOGY – WELDING TECHNOLOGY**

First Semester		Hours	Second Semester		Hours
UTEC 107	Math for Technology	4	MAMT 160	Properties of Materials	1
WELD 110	SMAW I	1	MAMT 160L	Properties of Materials Lab	1
WELD 110L	SMAW I Lab	5	WELD 120	SMAW II	1
WELD 115	Welding/Structural Theory	4	WELD 120L	SMAW II Lab	5
WELD 117	OFWC I	1	WELD 211	Gas Metal Arc Welding	1
WELD 117L	OFWC I Lab	1	WELD 211L	Gas Metal Arc Welding Lab	4
CADT 101	Introduction to Computers	1	WELD 221	Flux Cored Arc Welding	1
MAMT 105	Print Reading/Sketching	2	WELD 221	Flux Cored Arc Welding Lab	2
ENGL 111	English Composition	<u>3</u>	WELD 133	Fabrication Layout	3
		22	WELD 170	Practical Applications <u>or</u>	
			WELD 140	Job Shop	<u>3</u>
					22