

2005 - 06 PETITION/PROGRAM SHEET

Degree: Associate of Applied Science – Manufacturing Technology Emphasis: Machining Technology www.mesastate.edu/schools/utec/manf.htm

About This Degree...

This program offers classroom instruction and related lab work with hands-on activities in the use of tools and the operation of equipment found in manufacturing. Students will work in the area of blueprint reading, computer numerical control (CNC) machining, general machining and maintenance, computer-aided drafting (CAD), and related mathematics. This course of study 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)	e courses is the final course grade received except	for the courses in which I am
Signature of Advisor	Date	_20
		20
Signature of UTEC Director of Instruction	Date	
		20

GENER	AL EDU	CATION	(18 Seme	ster Hours	s)								
Course	<u>No.</u>	Credit	<u>Grade</u>	<u>Term</u>	<u>Year</u>	Trns/Subs	Course	No.	Credit	<u>Grade</u>	<u>Term</u>	<u>Year</u>	Trns/Subs
English (6 semeste	er hours)					Social an	d Behav	vioral Scie	nce, Hun	nanities o	r Selecte	d Speech
ENGL	111	3					Courses	6 semes	ter hours)				
ENGL	112	_ 3							3				
									3				
Mathema	atics - M	ATH 113	or UTEC	107 (4 se	mester ho	ours)	Human I	Perform	ance and	Wellness	(2 semest	er hours)	
		4					HPWA	100	1				
							HPWE		1				

Associate of Applied Science: Manufacturing Technology – Machining Technology Course Requirements (52 Semester Hours)

Course	<u>No.</u>	Credit	<u>Grade</u>	<u>Term</u>	<u>Year</u>	Trns/Subs	Course	<u>No.</u>	<u>Credit</u>	<u>Grade</u>	<u>Term</u>	<u>Year</u>	Trns/Subs
CADT	101	_1_					MAM	Γ 148	_ 3				
CADT	106	_1_					MAM	Γ <u>151</u>	_1_				
CADT	106L						MAM	Γ <u>151L</u>	2				
MAMT	101	2					MAM	Γ <u>155</u>	_1_				
MAMT	105	2					MAM	Γ <u>155L</u>	2				
MAMT	106	1				-	MAM	Γ 160	1				
MAMT	115	1				-	MAM	Γ <u>160L</u>	1				
MAMT	115L	2					MAM	Γ 207	2				
MAMT	120	_1_					UTEC	220	3				
MAMT	120L	3					WELI	151	_1_				
MAMT	125	_1_					WELI	151L	2				
MAMT	125L	3					PHYS	100	3				
MAMT	130	_1_					(or hig	her)					
MAMT	130L	3					Electiv	es (3 seme	ster hours	(Any col	lege level	undergra	duate
MAMT	140	_1_					course	s except H	PWE)				
and													
MAMT	140L	2						<u> </u>					
or													
MAMT	170	_3_											

- 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 MAMT.
- It is recommended that students work closely with a faculty advisor when selecting appropriate courses and scheduling classes.

GENERAL EDUCATION (18 Semester Hours)

English – 6 Semester Hours ENGL 111 and ENGL 112

Mathematics – 4 semester hours

UTEC 107 or MATH 113

Social and Behavioral Science, Humanities, or Selected Speech Courses – 6 semester hours (See current MSC catalog for the approved list of courses that fulfill this requirement.)

Human Performance and Wellness – 2 semester hours

HPWA 100 and one HPWE activity

Associate of Applied Science in Manufacturing Technology – Machining Technology (52 Semester Hours)

CADT 101 Introduction to Computers

CADT 106 Computer Aided Design

CADT 106L Computer Aided Design Laboratory

MAMT 101 Introduction to Manufacturing

MAMT 105 Print Reading/Sketching

MAMT 106 Geometric Tolerancing

MAMT 115 Introduction to Machine Shop

MAMT 115L Introduction to Machine Shop Laboratory

MAMT 120 Machine Technology I

MAMT 120L Machine Technology I Laboratory

MAMT 125 Machine Technology II

MAMT 125L Machine Technology II Laboratory

MAMT 130 Machine Technology III

MAMT 130L Machine Technology III Laboratory

MAMT 140 Job Shop Machining II and

MAMT 140L Job Shop Machining II Laboratory or

MAMT 170 Practical Applications

MAMT 148 CNC Applications

MAMT 151 Numerical Control Machining I

MAMT 151L Numerical Control Machining I Laboratory

MAMT 155 Numerical Control Machining II

MAMT 155L Numerical Control Machining II Laboratory

MAMT 160 Properties of Materials

MAMT 160L Properties of Materials Laboratory

MAMT 207 Introduction to Statistical Processes

UTEC 220 Industry Employment Practices

WELD 151 Industrial Welding

WELD 151L Industrial Welding Laboratory

PHYS 100 Concepts of Physics (or higher level physics course)

Electives (3 semester hours)

Additional expenses – Students in Machine Technology <u>may</u> be required to purchase approximately \$375.00 in safety glasses, tools, and material. This does not include the cost of textbooks. This cost may vary with student needs and brand or quality of tools and equipment purchased. All safety glasses must meet minimum industry safety standards of Z-87 with side shields.

SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF APPLIED SCIENCE WITH AN EMPHASIS IN MANUFACTURING TECHNOLOGY – MACHINING TECHNOLOGY

Second Semester

MAMT 101	Introduction to Manufacturing	2	ENGL 111	English Composition	3
UTEC 107	Math for Technology or		MAMT 120	Machine Technology I	1
MATH 113	College Algebra	4	MAMT 120L	Machine Technology I Lab	3
General Educati	on Soc/Beh Sci., Humanities, Speech	3	MAMT 125	Machine Technology II	1
CADT 101	Introduction to Computers	1	MAMT 125L	Machine Technology II Lab	3
MAMT 115	Introduction to Machine Shop	1	MAMT 130	Machine Technology III	1
MAMT 115L	Introduction to Machine Shop Lab	2	MAMT 130L	Machine Technology III Lab	3
MAMT 105	Print Reading/Sketching	2	MAMT 160	Properties of Materials	1
MAMT 106	Geometric Tolerancing	1	MAMT 160L	Properties of Materials Lab	<u>1</u>
HPWA 100	Health and Wellness	<u>1</u>			17
		17			
Third Semester		Hours	Fourth Semeste		Hours
ENGL 112	English Composition	Hours 3	MAMT 155	Numerical Control Machining II	Hours 1
					Hours 1 2
ENGL 112	English Composition		MAMT 155	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices	Hours 1 2 3
ENGL 112 CADT 106 CADT 106L HPWE Activity	English Composition Beginning CAD Beginning CAD Lab	3 1	MAMT 155 MAMT 155L	Numerical Control Machining II Numerical Control Machining II Lab	1 2
ENGL 112 CADT 106 CADT 106L HPWE Activity	English Composition Beginning CAD Beginning CAD Lab	3 1	MAMT 155 MAMT 155L UTEC 220	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or	1 2
ENGL 112 CADT 106 CADT 106L HPWE Activity	English Composition Beginning CAD Beginning CAD Lab	3 1 2 1 3 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II <u>and</u>	1 2
ENGL 112 CADT 106 CADT 106L HPWE Activity General Educati	English Composition Beginning CAD Beginning CAD Lab on Soc/Beh Sci., Humanities, Speech	3 1 2 1 3 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140 MAMT 140L	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or	1 2 3 1 2
ENGL 112 CADT 106 CADT 106L HPWE Activity General Educati MAMT 148	English Composition Beginning CAD Beginning CAD Lab on Soc/Beh Sci., Humanities, Speech CNC Applications	3 1 2 1 3 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140 MAMT 140L MAMT 170	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or Practical Application	1 2 3 1 2 3 1
ENGL 112 CADT 106 CADT 106L HPWE Activity General Educati MAMT 148 MAMT 207	English Composition Beginning CAD Beginning CAD Lab on Soc/Beh Sci., Humanities, Speech CNC Applications Intro to Statistical Process Control	3 1 2 1 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140 MAMT 140L MAMT 170 MAMT 151	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or Practical Application Numerical Control Machining I	1 2 3 1 2 3 1
ENGL 112 CADT 106 CADT 106L HPWE Activity General Educati MAMT 148 MAMT 207	English Composition Beginning CAD Beginning CAD Lab on Soc/Beh Sci., Humanities, Speech CNC Applications Intro to Statistical Process Control	3 1 2 1 3 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140 MAMT 140L MAMT 170 MAMT 151 MAMT 151L	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or Practical Application Numerical Control Machining I Numerical Control I Machining I Lab	1 2 3 1 2 3 1
ENGL 112 CADT 106 CADT 106L HPWE Activity General Educati MAMT 148 MAMT 207	English Composition Beginning CAD Beginning CAD Lab on Soc/Beh Sci., Humanities, Speech CNC Applications Intro to Statistical Process Control	3 1 2 1 3 3	MAMT 155 MAMT 155L UTEC 220 MAMT 140 MAMT 140L MAMT 170 MAMT 151 MAMT 151L WELD 151	Numerical Control Machining II Numerical Control Machining II Lab Industry Employment Practices Job Shop Machining II and Job Shop Machining II Lab or Practical Application Numerical Control Machining I Numerical Control I Machining I Lab Industrial Welding	1 2 3 1 2 3 1 2 1 2

Hours