



2005 – 06 PETITION/PROGRAM SHEET
Degree: Associate of Science
Emphasis: Manufacturing Technology
www.mesastate.edu/schools/utec/manf.htm

About This Emphasis . . .

The Associate of Science (A.S.) degree is designed for students who intend to continue their education and obtain a baccalaureate degree. The A.S. is the appropriate choice for students who will take upper division coursework in mathematics, biological sciences, and physical sciences. The degree program includes the Colorado Statewide General Education Core and meets the lower division general education requirements at most public institutions in Colorado. This program includes many of the same technical courses as the Certificate of Occupational Proficiency and Associate of Applied Science degree in Machine Technology.

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____

GENERAL EDUCATION REQUIREMENTS (33 Semester Hours)

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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English and Speech: ENGL 111 and 112, SPCH 102 (9 semester hours, must earn a grade of "C" or above in ENGL 111 and 112)

ENGL	111	3				
ENGL	112	3				
SPCH	102	3				

Physical Sciences/Math/Statistics (12 semester hours)

Science (minimum 8 semester hours) PHYS 111, 111L, 112, 112L are recommended.

PHYS	111					
PHYS	111L					
PHYS	112					
PHYS	112L					

Math (minimum 4 semester hours, MATH 113 or higher, must receive grade of "C" or above) MATH 113 is recommended.

MATH	113	4				
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Course	No.	Credit	Grade	Term	Year	Trns/Subs
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Social and Behavioral Sciences: (6 Semester Hours)
(Minimum of 2 different disciplines)

Humanities (6 semester hours)

(Minimum of 2 different disciplines)

Human Performance and Wellness (2 semester hours) HPWA 100 and one HPWE activity

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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HPWA	100	1				
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Course	No.	Credit	Grade	Term	Year	Trns/Subs
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HPWE		1				
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Associate of Science: Manufacturing Technology Course Requirements (31-32 Semester Hours)

Course	No.	Credit	Grade	Term	Year	Trns/Subs
CADT	101	1				
CADT	106	1				
CADT	106L	2				
MAMT	105	2				
MAMT	115	1				
MAMT	115L	2				
MAMT	120	1				
MAMT	120L	3				
MAMT	125	1				
MAMT	125L	3				
MAMT	148	3				

Course	No.	Credit	Grade	Term	Year	Trns/Subs
MAMT	151	1				
MAMT	151L	2				

Choose one of the following sequences (8 or 9 semester hours):
(MATH 130 and 151) or (MATH 152 and 253)

MATH	130	3				
and						
MATH	151	5				
OR						
MATH	152	5				
and						
MATH	253	4				

Additional Recommended Courses – Not Required

Course	No.	Credit	Grade	Term	Year	Trns/Subs
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CSCI						
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Course	No.	Credit	Grade	Term	Year	Trns/Subs
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- 60 semester hours are required for the Associate of Science degree. Must meet the academic residency requirements.
- 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.
- A grade of "C" or higher must be earned in all general education courses in order to be accepted for the transfer under the Core Transfer Agreements.
- No double counting is allowed between general education requirements and major requirements.
- It is recommended that students work closely with a faculty advisor when selecting appropriate courses and scheduling classes.

GENERAL EDUCATION REQUIREMENTS (minimum 33 Semester Hours)

English and Speech – 9 Semester Hours

ENGL 111 and ENGL 112 or ENGL 129 (*by permission*)

And SPCH 102 (required)

See current Mesa State College Catalog for list of courses that fulfill the requirements below.

Mathematics and Science – minimum 12 Semester Hours

Minimum 4 semester hours in Math and minimum 8 semester hours in Science. Both lecture and Lab must be taken in all courses having both.

Humanities – 6 semester hours. Minimum of two different disciplines required.

Social and Behavioral Sciences – 6 semester hours. Minimum of two different disciplines required.

OTHER REQUIREMENTS (2 Semester Hours)

Human Performance and Wellness – 2 Semester Hours

Each student must take HPWA 100 together with one HPWE Activity course. See current catalog for listing.

Associate of Science in Manufacturing Technology Course Requirements (31-32 Semester Hours)

CADT 101 Introduction to Computers
CADT 106 Computer Aided Design
CADT 106L Computer Aided Design Laboratory
MAMT 105 Print Reading/Sketching
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 148 CNC Applications
MAMT 151 Numerical Control Machining II
MAMT 151L Numerical Control Machining II Laboratory
MATH 130 Trigonometry **and**
MATH 151 Calculus I or
MATH 152 Calculus II **and**
MATH 253 Calculus III
Recommended:
CSCI XXX Computer Course
PHYS 111 General Physics I
PHYS 111L General Physics I Laboratory
PHYS 112 General Physics II
PHYS 112L General Physics II Laboratory

- 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 the student take CSCI 100, MATH 113 (prerequisite to MATH 130) and PHYS 111/111L.
- Additional expenses – Students in Machine Trades may be required to purchase approximately \$375.00 in safety glasses, tools, and materials. This does not include the cost of textbooks. These costs may vary with student needs 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 ASSOCIATE OF SCIENCE WITH AN EMPHASIS IN MANUFACTURING TECHNOLOGY

FRESHMAN YEAR

First Semester		Hours	Second Semester		Hours
ENGL 111	English Composition	3	ENGL 112	English Composition	3
General Education Mathematics (MATH 113 or higher)		4	MATH XXX	Mathematics	3
CSCI XXX	Computer Course	3	General Education Social/Behavioral Science		3
General Education Social/Behavioral Science		3	CADT 106	Computer Aided Design	1
MAMT 105	Print Reading/Sketching	2	CADT 106L	Computer Aided Design Lab	2
MAMT 115	Introduction to Machine Shop	1	MAMT 120	Machine Technology I	1
MAMT 115L	Introduction to Machine Shop Laboratory	2	MAMT 120L	Machine Technology I Lab	<u>3</u>
CADT 101	Introduction to Computers	<u>1</u>			16
		19			

SOPHOMORE YEAR

Third Semester		Hours	Fourth Semester		Hours
PHYS 111	General Physics I	4	PHYS 112	General Physics II	4
PHYS 111L	General Physics I Lab	1	PHYS 112L	General Physics II Lab	1
MATH XXX	Mathematics	5	General Education Humanities		6
MAMT 125	Machine Technology II	1	HPWA 100	Health and Wellness	1
MAMT 125L	Machine Technology II Lab	3	HPWE Activity		1
MAMT 148	CNC Applications	3	SPCH 102	Speechmaking	<u>3</u>
MAMT 151	Numerical Control I	1			16
MAMT 151L	Numerical Control I Lab	<u>2</u>			
		20			