



2008-2009 PETITION/PROGRAM SHEET

Degree: Associate of Science

Major: Liberal Arts

Emphasis: Manufacturing Technology

www.mesastate.edu/wccc/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 WCCC Director 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: _____

_____ () _____

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

Signature of WCCC Director

Date

Signature of Registrar

Date

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

Degree Requirements:

- 60 semester hours are required for the Associate of Science degree. Must meet the academic residency requirements.
- 2.00 cumulative GPA or higher in all MSC 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 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.
- Program sheets are for advising purposes only. Because a program may have requirements specific to the degree, check with your advisor for additional guidelines, including prerequisites, grade point averages, grades, exit examinations, and other expectations. It is the student's responsibility to be aware of, and follow, all guidelines for the degree being pursued. Any exceptions or substitutions must be approved by the faculty advisor and/or Department Head. Courses related to teacher licensure must also be approved by the Teacher Education Dept.
- When filling out the program sheet a course can be used only once.
- See the “Undergraduate Graduation Requirements” in the Mesa State College catalog for additional graduation information.

GENERAL EDUCATION REQUIREMENTS (31 semester hours)

See the current Mesa State College 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 |
|--------|----|-------|---------|-------|-----------|
|--------|----|-------|---------|-------|-----------|

English (6 semester hours, must receive a grade of “C” or better and must be completed by the time the student has 60 semester hours.)

| | | | | | |
|----------|---------------------|---|-------|-------|-------|
| ENGL 111 | English Composition | 3 | _____ | _____ | _____ |
| ENGL 112 | English Composition | 3 | _____ | _____ | _____ |

(ENGL 129, Honors English, may be substituted for ENGL 111 & ENGL 112.)

Math: MATH 113 or higher (3 semester hours, must receive a grade of “C” or better, must be completed by the time the student has 60 semester hours.)

| | | | | | |
|----------|-----------------|----|-------|-------|-------|
| MATH 113 | College Algebra | 4* | _____ | _____ | _____ |
|----------|-----------------|----|-------|-------|-------|

*3 credits apply to the General Ed requirements and 1 credit applies to elective credit

Social and Behavioral Sciences (6 semester hours)

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

| Course | No | Title | Sem.hrs | Grade | Term/Trns |
|--------|----|-------|---------|-------|-----------|
|--------|----|-------|---------|-------|-----------|

Humanities (3 semester hours)

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|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
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Natural Sciences (7 semester hours, one course must include a lab)

PHYS 111/11L & PHYS 112/112L are recommended

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|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | L | _____ | _____ | _____ | _____ |

History (3 semester hours)

| | | | | | |
|------|-------|-------|-------|-------|-------|
| HIST | _____ | _____ | _____ | _____ | _____ |
|------|-------|-------|-------|-------|-------|

Fine Arts (3 semester hours)

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
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OTHER LOWER DIVISION REQUIREMENTS (5 semester hours)

Kinesiology (2 semester hours)

| | | | | | |
|----------|---------------------|---|-------|-------|-------|
| KINE 100 | Health and Wellness | 1 | _____ | _____ | _____ |
|----------|---------------------|---|-------|-------|-------|

| | | | | | |
|--------|-------|---|-------|-------|-------|
| KINA 1 | _____ | 1 | _____ | _____ | _____ |
|--------|-------|---|-------|-------|-------|

Applied Studies (3 semester hours)

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|-------|-------|-------|-------|-------|-------|
| _____ | _____ | _____ | _____ | _____ | _____ |
|-------|-------|-------|-------|-------|-------|

ASSOCIATE OF SCIENCE: MANUFACTURING TECHNOLOGY COURSE REQUIREMENTS

(31-32 semester hours)

Core Classes

| | | | | | |
|----------|---------------------------|---|-------|-------|-------|
| CADT 101 | Introduction to Computers | 1 | _____ | _____ | _____ |
|----------|---------------------------|---|-------|-------|-------|

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|----------|----------------|---|-------|-------|-------|
| CADT 108 | CAD Mechanical | 3 | _____ | _____ | _____ |
|----------|----------------|---|-------|-------|-------|

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|----------|-------------------------|---|-------|-------|-------|
| MAMT 105 | Print Reading/Sketching | 2 | _____ | _____ | _____ |
|----------|-------------------------|---|-------|-------|-------|

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|----------|------------------------------|---|-------|-------|-------|
| MAMT 115 | Introduction to Machine Shop | 3 | _____ | _____ | _____ |
|----------|------------------------------|---|-------|-------|-------|

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|-----------|-----------------|---|-------|-------|-------|
| *MATH 113 | College Algebra | 1 | _____ | _____ | _____ |
|-----------|-----------------|---|-------|-------|-------|

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|----------|----------------------|---|-------|-------|-------|
| MAMT 120 | Machine Technology I | 4 | _____ | _____ | _____ |
|----------|----------------------|---|-------|-------|-------|

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|----------|-----------------------|---|-------|-------|-------|
| MAMT 125 | Machine Technology II | 4 | _____ | _____ | _____ |
|----------|-----------------------|---|-------|-------|-------|

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|----------|------------------|---|-------|-------|-------|
| MAMT 148 | CNC Applications | 3 | _____ | _____ | _____ |
|----------|------------------|---|-------|-------|-------|

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|----------|-------------------|---|-------|-------|-------|
| MAMT 151 | Numerical Control | 3 | _____ | _____ | _____ |
|----------|-------------------|---|-------|-------|-------|

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|--|--------------|---|-------|-------|-------|
| | Machining II | 3 | _____ | _____ | _____ |
|--|--------------|---|-------|-------|-------|

Choose one of the following sequences (8 or 9 semester hours):

(MATH 130 and 151) or (MATH 152 and 253)

| | | | | | |
|----------|--------------|---|-------|-------|-------|
| MATH 130 | Trigonometry | 3 | _____ | _____ | _____ |
|----------|--------------|---|-------|-------|-------|

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| and | | | | | |
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|----------|------------|---|-------|-------|-------|
| MATH 151 | Calculus I | 5 | _____ | _____ | _____ |
|----------|------------|---|-------|-------|-------|

| | | | | | |
|-----------|--|--|--|--|--|
| OR | | | | | |
|-----------|--|--|--|--|--|

| | | | | | |
|----------|-------------|---|-------|-------|-------|
| MATH 152 | Calculus II | 5 | _____ | _____ | _____ |
|----------|-------------|---|-------|-------|-------|

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|-----|--|--|--|--|--|
| and | | | | | |
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|----------|--------------|---|-------|-------|-------|
| MATH 253 | Calculus III | 4 | _____ | _____ | _____ |
|----------|--------------|---|-------|-------|-------|

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 A MAJOR IN MANUFACTURING 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 Mesa State website for course availability.

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 |
| General Education Social/Behavioral Science | | 3 | General Education Social/Behavioral Science | | 3 |
| MAMT 105 | Print Reading/Sketching | 2 | CADT 108 | CAD Mechanical | 3 |
| MAMT 115 | Introduction to Machine Shop | 3 | MAMT 120 | Machine Technology I | <u>4</u> |
| CADT 101 | Introduction to Computers | <u>1</u> | | | 16 |
| | | 16 | | | |

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 | 4 | KINE 100 | Health and Wellness | 1 |
| MAMT 148 | CNC Applications | 3 | KINA | Activity | 1 |
| MAMT 151 | Numerical Control I | <u>3</u> | SPCH 102 | Speechmaking | <u>3</u> |
| | | 20 | | | 16 |