2010 – 2011 PETITION/PROGRAM SHEET
Degree: Bachelor of Science
Major: Mechanical Engineering Technology
www.mesastate.edu/academics/programs.html

About This Major . . . The objective of the Mechanical Engineering Technology Program is to provide the knowledge necessary to apply state-of-the-art techniques to design and build products and systems to meet the current and future needs of society.

The Bachelor of Science Degree in Mechanical Engineering Technology is designed for a student who is a doer or implementer - one who is able to apply mathematics, the natural and engineering sciences, engineering principals, and current engineering practices to the solution of design problems and to the operation and testing of mechanical systems. The Mechanical Engineering Technology graduate applies established procedures that use the current state-of-the-art. Laboratory courses are an integral component of the Mechanical Engineering Technology program and are designed to develop student competence to apply experimental design methods, as well as provide a "hands-on" approach to designing and building products and systems to meet the current and future needs of society.

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 Department Head for signature.
5. Finally, the Department Head 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 will 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.

_____ _____ 20_____
Signature of Advisor Date

_____ _____ 20_____
Signature of Department Head Date

_____ _____ 20_____
Signature of Registrar Date

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

Degree Requirements:

- 125 semester hours total (A minimum of 28 taken at MSC)
- 40 upper division credits (A minimum of 15 taken within the major at MSC)
- 2.00 cumulative GPA or higher in all MSC coursework
- 2.00 cumulative GPA or higher in coursework toward the major content area
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- When filling out the program sheet a course can be used only once.
- A student must follow the MSC 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 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
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: (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)					
MATH	119	Pre-Calculus	5*		
*3 credits apply to the General Ed requirements and 2 credit applies to Foundation Courses					
Humanities (3 semester hours)					
Social and Behavioral Sciences (6 semester hours)					
Natural Sciences (7 semester hours, one course must include a lab)					
PHYS 111/111L **or** PHYS 131/131L					
PHYS			4		
PHYS			1		
CHEM	131	General Chemistry	4*		
*2 credits apply to the General Ed requirements and 2 credits apply to Foundation Courses					
History (3 semester hours)					
HIST					

Course	No	Title	Sem.hrs	Grade	Term/Trns
Fine Arts (3 semester hours)					

OTHER LOWER DIVISION REQUIREMENTS (6 semester hours)

Kinesiology (3 semester hours)					
KINE	100	Health and Wellness	1		
KINA	1		1		
KINA	1		1		
Applied Studies (3 semester hours)					
SPCH	102	Speechmaking	3		
FOUNDATION COURSES (25 semester hours) Must complete with a "C" or higher.					
CHEM	131	General Chemistry	2*		
*2 credits apply to the General Ed requirements and 2 credits apply to foundation courses					
CHEM	131L	General Chemistry Lab	1		
MAMT	106	Geometric Tolerancing	1		
MAMT	120	Machine Technology I	4		
MATH	119	Pre-Calculus	2*		
*3 credits apply to the General Ed requirements and 2 credits apply to foundation courses					
MATH	151	Calculus I	5		
MATH	152	Calculus II	5		
STAT	200	Probability and Statistics	3		
WELD	151	Industrial Welding	2		

MECHANICAL ENGINEERING TECHNOLOGY MAJOR REQUIREMENTS (63 semester hours) Must pass all courses with a grade of "C" or higher.

Basic Engineering Courses (15 semester hours)					
ENGR	125	CAD and Fabrication	3		
ENGR	140	First-Year Engr. Projects	3		
ENGR	224	Materials Science	3		
ENGR	261	Statics and Structures	3		
ENGR	263	Mechanics of Solids	3		
MET Courses (30 semester hours)					
ENGR	312	Engineering Thermodynamics	3		
ENGR	317	Fund of Cir and Elect	3		
ENGR	321	Fluid Mechanics	3		
ENGR	325	Component Design	3		
ENGR	343	Dynamics	3		
ENGR	426	Manuf. Processes & Sys	3		
ENGR	430	Fluid Power Systems	3		
ENGR	440	Indust Control & Elec Power	3		
ENGR	445	MET Design Proj I	3		
ENGR	485	MET Design Proj II	3		
Other Required Courses (12 semester hours)					
CSCI	130	Intro to Engineering Computing	3		
ENGL	425	Scientific Writing	3		
MAMT	151	Numerical Control Mach I	3		
MAMT	155	Numerical Control Mach II	3		
MET Technical Electives (6 semester hours)					

Choose from any upper level natural or physical science course in consultation with your advisor, or from the list below.

MET TECHNICAL ELECTIVES

CHEM 132 General Chemistry (4)
and CHEM 132L General Chemistry Lab (1)
**PHYS 112 General Physics (4)
and PHYS 112L General Physics Lab (1)
or
**PHYS 132 Electromagnetism and Optics (4)
and PHYS 132L Electromagnetism and Optics Lab (1)
PHYS 231 Modern Physics (3)

**Either PHYS 112/112L or PHYS 132/132L may be taken for credit, but not both.

SUGGESTED COURSE SEQUENCING FOR A MAJOR IN MECHANICAL ENGINEERING 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

Fall Semester		Hours
MATH 119	Pre-Calculus	5
ENGL 111	English Composition	3
ENGR 125	CAD and Fabrication	3
MAMT 106	Geometric Tolerancing	1
KINE 100	Health and Wellness	1
General Education	History	3
		16

Spring Semester		Hours
MATH 151	Calculus I	5
ENGL 112	English Composition	3
ENGR 140	First-Year Engr. Projects	3
MAMT 120	Machine Technology I	4
KINA 1**	Activity	1
		16

SOPHOMORE YEAR

Fall Semester		Hours
MATH 152	Calculus II	5
PHYS 131or 111	Fundamental Mechanics	4
PHYS 131L or 111L	Fundamental Mech Lab	1
ENGR 317	Fund of Cir and Elect	3
SPCH 102	Speechmaking	3
		16

Spring Semester		Hours
STAT 200	Probability and Statistics	3
CSCI 130	Intro to Engr Computing	3
CHEM 131	General Chemistry	4
CHEM 131L	General Chemistry Lab	1
WELD 151	Industrial Welding	2
ENGR 261	Statics and Structures	3
		16

JUNIOR YEAR

Fall Semester		Hours
ENGR 263	Mechanics of Solids	3
ENGR 224	Materials Science	3
MAMT 151	Numerical Control Mach I	3
ENGR 321	Fluid Mechanics	3
KINA 1**	Activity	1
General Education	Humanities	3
		16

Spring Semester		Hours
ENGR 325	Component Design	3
ENGR 343	Dynamics	3
ENGR 312	Engr Thermodynamics	3
MAMT 155	Numerical Control Mach II	3
ENGL 425	Scientific Writing	3
		15

SENIOR YEAR

Fall Semester		Hours
ENGR 445	Senior Project 1	3
ENGR 426	Manufacturing Proc & Sys	3
ENGR 440	Indust Controls & Elec Power	3
MET Technical Elective		3
General Education	Social/Behavioral Sci	3
		15

Spring Semester		Hours
ENGR 485	Senior Project 2	3
ENGR 430	Fluid Power Systems	3
MET Technical Elective		3
General Education	Social Science	3
General Education	Fine Arts	3
		15