# ADD, CHANGE OR DELETE UNIT, PROGRAM REQUIREMENTS, OR ACADEMIC POLICIES

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit or to change program policies. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

SECTION I: App	provals							
Department / Program Chair		Submitted	Graduate Council Chair	Date				
College Dean			Faculty Senate Chair	Date				
Honors College Dean			Provost	Date				
Core Curriculum Committee		Board of Trustees Approval/Notification Da		tification Date				
University Course and Programs Committee Date			Arkansas Higher Education Coordi	nating Board Approval/Notification Date				
SECTION II: Pro	ofile Data - Required Inf	ormation and I	Name Change Information					
Academic Unit:	Major/Field of Stud	dy Minor	Other Unit	Policy				
Level:	□ Undergraduate	Graduate	e Law Effectiv	e Catalog Year				
Program changes are	effective with the next avail	able catalog. See	Academic Policy Series 1622.	20				
Current Name	Current Name BS, Mechanical Engineering							
College, School, Division ENGR Department Code MEEG								
Current Code (6 digit Alpha) MEEGBS			Proposed Code (6 digit Alpha) Prior approval from the Office of the Registrar is required.					
☐Interdisciplinary Program			CIP Code 14.1901 Prior assignment from Office of Institutional Research is required.					
Proposed Name When a program name is ch	_ nanged, enrollment of current stude	ents reflects the new n	ame.					
SECTION III: Add	d a New Program/Unit							
'Criteria and Procedur	proposals, complete Section es for Preparing Proposals f u/divisions/academicaffair	or New Programs	in Arkansas.' ADHE	rogram proposal as described in				
			demic college, and that college ired here:	dean's office has been notified. Th				
SECTION IV: Elin	minate an Existing Prog	ram/Unit						
Code/Name	Effective Catalog Year	·						
No new students admi	itted to program after Term: gram to complete under this	Year:						

SECTION V: Proposed Changes to an Existing Program or Program Policies

Insert here a statement of the exact changes to be made: <u>There are 3 specific changes to the MEEGBS:</u>
1) No longer require 6 hours of upper level Humanities/FineArts and Social Sciences, but will require 18 hour University core in the areas of Fine Arts/Humanities, U.S. History and Social Sciences, as per recent College of Engineering decision.

2) Require PHIL 3103 (Ethics and the Professions) as the 3 semester hour Humanities requirement in the 18 hour University core for MEEGBS.

3) Replace CHEM 1103 (University Chemistry I) with CHEM 1113 (Chemistry for Engineers I) for degree credit. This is in repsonse to new courses developed by CHBC for engineering majors.

Check if either of these boxes apply and provide the necessary signature:					
Program change proposal adds courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here:					
Program change proposal deletes courses offered by another academic college, and that college dean's office has been notified. The signature of the dean of that academic college is required here:					
Check all the boxes that apply and complete the required sections of the form:					
<ul> <li>□ Change of Name and Code (Complete only sections I, II, V and VII.)</li> <li>□ Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)</li> <li>□ Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)</li> <li>□ Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)</li> <li>□ Change in Program Policies</li> </ul>					

#### **SECTION VI: Justification**

Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)

As stated above, the changes presented here are in response to recent decisions made within the College of Engineering and between the College of Engineering and the Department of Chemistry & Biochemistry as well as an effort to improve the level and quality of instruction received by MEEGBS students in the area of ethics. The proposed changes to the degree will help improve the breadth and quality of the MEEGBS program. These changes are not expected to significantly affect any other programs.

## **SECTION VII: Catalog Text and Format**

In the box below, insert the current catalog text which is to be changed, with changes highlighted with the color yellow. Include all proposed changes identified in Section V. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate. If you are proposing a new program, give proposed text with all of the elements listed below. If you are proposing modified text, include these elements as appropriate.

### Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.
- State eight-semester plan requirements

For minors, state requirements in terms of hours, required courses, electives, etc.

For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.

For Law School program/units, prepare text consistent with current catalog style.

For centers, prepare text consistent with current catalog style.

#### **Core Requirements**

The University of Arkansas has adopted University Core Requirements (sometimes called State Minimum Core) of 35 semester-credit-hours of general education courses that are required of all baccalaureate degree candidates. This is in compliance with Arkansas Act 98 of 1989 and the subsequent action of the Arkansas State Board of Higher Education. Beginning in the fall semester of 1991, all state institutions of higher education in Arkansas have a 35-hour minimum core requirement with specified hours in each of six academic areas. The University and the College of Engineering have identified those courses that meet the minimum requirement, and they are listed in the chart below.

Students should consult the requirements for specific departments and programs when choosing courses for use in the University Core.

Every student in the College of Engineering is required to complete a minimum of 18 semester hours in the humanities and social sciences. Six semester hours must be at the 3000-level or above. A list of approved upper-level humanities/social science courses is available in departmental offices and the dean's office.

No more than nine semester hours from any single discipline may be presented for degree credit. To meet the University Core requirements, the total number of hours (both upper level and lower level) in the fine arts/humanities courses must be at least six, and the social science hours must total at least nine (in addition to the U.S. history or government requirement). The six hours of courses at the 3000 and 4000 level may be in the fine arts and humanities area, the social science area, or divided between the two areas. Since some of the humanities and social science courses are specified in some of the curricula, e.g., ECON 2143 in chemical and mechanical engineering, the student should consult the curriculum of the department in which he or she is enrolled prior to selecting upper-level electives.

### **Specific University Core Requirements for Engineering Students**

#### English - 6 hours

ENGL 1013 Composition I

ENGL 1023 Technical Composition II (ENGL 1023 Composition II may be taken in lieu of Technical Composition II)

#### Mathematics - 4 hours

MATH 2554 Calculus I

#### Science - 8 hours

PHYS 2054 University Physics I

PHYS 2074 University Physics II or

CHEM 1123, 1121L University Chemistry II

### U.S. History or Government - 3 hours

HIST 2003 History of American People to 1877

HIST 2013 History of American People 1877 to Present

PLSC 2003 American National Government

## Fine Arts and Humanities – 6 hours

## Social Sciences – 9 hours

Six hours of Fine Arts, Humanities and Social Sciences must be upper level courses (3000-4000 level). A list of approved courses is available in departmental offices.

The changes stated in Section V are shown below.

## Mechanical Engineering B.S.M.E.

### **Eight-Semester Degree Program**

The following section contains the list of courses required for the Bachelor of Science in Mechanical Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites.

Students interested in obtaining a sequencing schedule of courses may contact the Mechanical Engineering office. Students wishing to follow the eight-semester degree plan should see page 40 in the Academic Regulations chapter for university requirements of the program.

Either the science elective in the second semester of Year 1 or the science elective in the first semester of Year 2 must include PHYS 2074. Other science electives should be chosen from an approved list. See the mechanical engineering office.

#### Fall Semester Year 1

3 ENGL 1013 Composition I

## 3 CHEM 1113 University Chemistry for Engineers I

4 PHYS 2054 University Physics I

4 MATH 2554 Calculus I

1 GNEG 1111 Introduction to Engineering I

#### 15 Semester Hours

#### **Spring Semester Year 1**

#### 3 HIST 2003 or HIST 2013 or PLSC 2003

1 GNEG 1121 Introduction to Engineering II

4 MATH 2564 Calculus II

4 Freshman Science Elective (See note above)

3 ENGL 1023 Technical Composition II

#### 15 Semester Hours

#### Fall Semester Year 2

0 MEEG 2100 Computer-Aided Design Competency

4 Science Elective (See note above)

4 MATH 2574 Calculus III

3 MEEG 2303 Introduction to Materials

3 MEEG 2003 Statics

#### **14 Semester Hours**

## **Spring Semester Year 2**

4 MATH 3404 Differential Equations

3 MEEG 2013 Dynamics

3 MEEG 2403 Thermodynamics

3 MEEG 2703 Computer Methods in Mechanical Engineering

3 MEEG 2103 Introduction to Machine Analysis

#### **16 Semester Hours**

### **Fall Semester Year 3**

3 MEEG 3013 Mechanics of Materials

3 MEEG 3113 Machine Dynamics and Control

2 MEEG 3202L Mechanical Engineering Laboratory I

3 MEEG 3503 Mechanics of Fluids

3 ELEG 3903 Circuits & Machines

### 3 ECON 2013 or ECON 2143

### 17 Semester Hours

## **Spring Semester Year 3**

2 MEEG 3212L Mechanical Engineering Laboratory II

3 MEEG 4413 Heat Transfer

4 MEEG 4104 Machine Element Design

3 ELEG 3933 Circuits and Electronics

3 Technical/Science Elective

3 PHIL 3103 - Ethics and the Professions

#### **18 Semester Hours**

## Fall Semester Year 4

2 MEEG 4132 Professional Engineering Practices

1 MEEG 4131 Creative Project Design I

2 MEEG 4202L Mechanical Engineering Laboratory III

3 MEEG 4483 Thermal Systems Analysis and Design

3 Technical/Science Elective

3 Fine Arts Elective (from University/State core list)

### **14 Semester Hours**

# **Spring Semester Year 4**

MEEG 4133 Creative Project Design II		
3 Technical/Science Elective		
Technical/Science Elective		
Social Science Elective (from University/State core list)		
Social Science Elective (from University/State core list)		
5 Semester Hours		

124 Total Hours

SECTION VIII: Action Recorded by Registrar's Office								
PROGRAM INVE	NTORY/DARS							
PGRM	SUBJ	CIP	CRTS					
DGRE	PGCT	OFFC&CRTY VAL	OFFC&CRTY VALID					
REPORTING COI	DES							
PROG. DEF	_	REQ. DEF.	Initials	Date				
Distribution								
Notification to: (1) College (7) Treasurer	(2) Department (3) Admissions (8) Undergraduate Program Committee	(4) Institutional Research	(5) Continuing Education	(6) Graduate School				

5/12/08