# 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.

Department / Program Chair	Date Sub	mitted	Graduate Council Chair		Date
College Dean	Date		Faculty Senate Cha	ir	Date
Honors College Dean	Date		Provost		Date
Core Curriculum Committee	Date		Board of Trustees Approval/Notification Date		
University Course and Programs Committee Date			Arkansas Higher Education Coordinating Board Approval/Notification Date		
SECTION II: Profile Da	nta - Required Inform	nation and Na	ame Change Inf	ormation	
Academic Unit:	Major/Field of Study	Minor	Other Unit	Policy	
Level:	Undergraduate	Graduate	Law	Effective Catalog Year	
Program changes are effective	e with the next available	e catalog. See A	cademic Policy Se	eries 1622.20	
Current Name BS	SEE, Electrical Engine	ering			
College, School, Division ENGR		Department Code ELEG			
Current Code (6 digit Alpha) ELEGBS		Proposed Code (6 digit Alpha) Prior approval from the Office of the Registrar is required.			
Interdisciplinary Program		CIP Code <u><b>14.1001</b></u> Prior assignment from Office of Institutional Research is required.			
Proposed Name When a program name is changed, en	nrollment of current students	reflects the new nam	ne.		

## SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <a href="http://www.adhe.edu/divisions/academicaffairs/Pages/aa\_academicproposals.aspx">http://www.adhe.edu/divisions/academicaffairs/Pages/aa\_academicproposals.aspx</a>

Program proposal uses 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:

## **SECTION IV: Eliminate an Existing Program/Unit**

Code/Name \_\_\_\_\_ Effective Catalog Year \_\_\_\_

No new students admitted to program after Term: \_\_\_\_ Year: \_\_\_\_ Allow students in program to complete under this program until Term: \_\_\_\_ Year: \_\_\_\_

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

Insert here a statement of the exact changes to be made: <u>Remove the 3000-level H/SS requirement; change required</u> <u>Chemistry course; update course number for Differential Equations; and remove Chem 1 lab, which reduces the program</u> <u>hours by one (126 to 125).</u>

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:

Change of Name and Code (Complete only sections I, II, V and VII.)

Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

## **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.)

The upper level H/SS courses are no longer required for accreditation by ABET. This will also simplify the University Core for College of Engineering students. Chem 1 is being replaced by a new Chemistry course specifically for engineers, which does not have a lab component; hence, the 1 hour Chem lab is being removed from the curriculum.

## 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.

#### **Graduation Requirements**

In addition to the specific departmental requirements for degree plans, students should refer to the Academic Regulations of this catalog for general university requirements. A portion of that information is listed here for convenience.

1. Grade-Point Average – A candidate for a degree from the College of Engineering must have earned a grade-point average of no less than 2.00 on all

courses in the student's major area of study, all engineering courses, and all work completed at the university and presented for the degree. Grades on work taken at other colleges and presented for transfer credit must also meet this standard.

- 2. Courses That Do Not Count Toward a Degree The following courses do not count toward degree credit: ANTH 0003, PHSC 0003, ENGL 0003, MATH 0003, CIED 0003, MATH 1203, MATH 1213, and MATH 1285.
- **3. "D" Rule** No student will be allowed to graduate if the student has "D" grades in more than 15 percent of all credit earned in this institution and presented to meet the requirements for a degree.

## 4. Transfer of Courses

- a) All courses taken at another institution are subject to approval by the dean of the College of Engineering and the head of the degree-granting department. Credit from all institutions must be approved on a course-by-course basis to ensure its acceptability in fulfilling requirements for a degree in engineering. In making this evaluation, the student may be required by the dean and/or department head to produce catalogs from the institution from which the student is transferring that contain descriptions of the courses for which credit is expected in an engineering discipline.
- b)Advanced (3000- and 4000-level at the University of Arkansas) engineering courses may not normally be transferred from institutions that do not have programs accredited by the Engineering Accreditation Commission or Computing Accreditation Commission of the ABET.
- c) A maximum of six hours of "D" grades can be transferred for degree credit. These courses must be part of the General Education Core or an elective course in the degree program (see Transfer of Credit section general education requirements of this catalog for more information).
- 5.68 Hour Rule Students who transfer into the University may present for degree credit no more than 68 hours of lower division course work (1000 and 2000 level).
- 6. University Core (State Minimum Core) The University of Arkansas has adopted a University 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/she is enrolled prior to selecting upper-level electives.

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

	Hours
English	6
ENGL 1013 Composition I	
ENGL 1023 Technical Composition II	
Mathematics	4
MATH 2554 Calculus I	
Science	8
PHYS 2054 University Physics I	
PHYS 2074 University Physics II or	
CHEM 1123, 1121L University Chemistry II or	
BIOL 1543, 1541L Principles of Biology	
U.S. History or Government	3
HIST 2003 History of American People to 1877	
HIST 2013 History of American People 1877 to Present	
PLSC 2003 American National Government	

Fine Arts, Humanities and Social Sciences Fine Arts and Humanities Social Sciences

9

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.

Electrical Engineering B.S.E.E.

## **Eight-Semester Degree Program**

The following section contains the list of courses required for the Bachelor of Science in Electrical Engineering and a suggested eight-semester 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.

## Fall Semester Year 1

1 GNEG 1111 Introduction to Engineering I 3 ENGL 1013 Composition I 4 MATH 2554 Calculus I 3 CHEM 1113 Chemistry for Engineers I 4 PHYS 2054 University Physics I

**15 Semester hours** 

## Spring Semester Year 1

1 GNEG 1121 Introduction to Engineering II 3 ENGL 1023 Composition II 4 MATH 2564 Calculus II 3 HIST 2003 or HIST 2013 or PLSC 2003 4 PHYS 2074 University Physics II 15 Semester hours

## Fall Semester Year 2

4 ELEG 2104 Electric Circuits I with lab
4 ELEG 2904 Digital Design I with lab
4 MATH 2584 Differential Equations
4 BIOL 1543/1541L or BIOL 2213/2211L or CHEM 1133/1131L
16 Semester hours

## **Spring Semester Year 2**

4 CSCE 2004 Programming Foundations I
4 ELEG 2114 Electric Circuits II with lab
4 MATH 2574 Calculus III
3 Humanities Elective (from university/state core list)
1 CHEM 1101L Chemistry Hab6
15 Semester hours

#### Fall Semester Year 3

4 ELEG 3124 Systems and Signals with lab
4 ELEG 3214 Electronics I with lab
4 ELEG 3924 Microprocessor Systems Design with lab
4 ELEG 3704 Applied Electromagnetics with lab
16 Semester hours

## Spring Semester Year 3

4 ELEG 3224 Electronics II with lab
4 ELEG 3303 Energy Systems with lab
3 ELEG 3143 Probability and Stochastic Processes
3 Social Science Elective (from university/state core list)
3 Math/Science/Technical Elective

17 Semester hours
Fall Semester Year 4
1 ELEG 4061 Electrical Engineering Design I
3 Electrical Engineering Technical Elective
3 Electrical Engineering Technical Elective
3 Engineering Science/Technical Elective
3 ECON 2013 or ECON 2023 or ECON 2143
3 Fine Arts Elective (from university/state core list)
16 Semester hours
Spring Semester Year 4
3 ELEG 4073 Electrical Engineering Design II
3 Electrical Engineering Technical Elective
3 Technical Elective
3 Technical Elective
3 Social Science Elective (from university/state core list)
15 Semester hours
125 Total hours

# SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVE	NTORY/DARS				
PGRM	SUBJ	CIP	CRTS		
DGRE	PGCT	OFFC&CRTY VALID			
REPORTING COD	DES				
PROG. DEF		REQ. DEF. Initials		Date	
Distribution					
Notification to: (1) College (7) Treasurer	<ul><li>(2) Department (3) Admissions</li><li>(8) Undergraduate Program Committee</li></ul>	(4) Institutional Research	(5) Continuing Education	(6) Graduate School	

5/12/08