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 Subr	nitted	Graduate Council Chair		
College Dean	Date		Faculty Senate Cha	ir	Date
Honors College Dean	Date		Provost		Date
Core Curriculum Committee			Board of Trustees Approval/Notification Date		
University Course and Programs Committee		Arkansas Higher Education Coordinating Board Approval/Notification Date			
SECTION II: Profile Data - Requ	ired Inform	nation and N	ame Change Inf	ormation	
Academic Unit: Major/Fiel	ld of Study	Minor	Other Unit		Policy
Level: 🛛 Undergrad	luate	Graduate	Law	Effective Cata	llog Year
Program changes are effective with the n	ext available	catalog. See A	Academic Policy Se	eries 1622.20	
Current Name <u>BSChE</u> , <u>Bacl</u>	helor of Scier	nce in Chemic	al Engineering		
College, School, Division ENGR	Department Code CHEG				
Current Code (6 digit Alpha) CHEGBS		Proposed Code (6 digit Alpha) Prior approval from the Office of the Registrar is required.			
Interdisciplinary Program	CIP Code <u>14.0701</u> Prior assignment from Office of Institutional Research is required.				

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 http://www.adhe.edu/divisions/academicaffairs/Pages/aa_academicproposals.aspx

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:

<u>SECTION IV</u>: 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>There are five changes to be made to the CHEGBS. (1) Require</u> <u>GNEG 1111 and 1121. (2) No longer require ELEG 3903 (it can be taken as a Technical Elective). (3) Replace the current</u> requirement of six hours of Technical Electives with a requirement of three hours of Technical Electives or three hours of

Electives and three hours of Advanced Science or Chemical Engineering Electives.). (4) Renumber CHEG 1113 to CHEG 2113 and CHEG 1212L to CHEG 2212L because these courses are now in the second year of the official eight semester plan. (5) Revise the chemistry requirements to CHEM 1113, CHEM 1133, and CHEM 1131L (in place of CHEM 1103, CHEM 1123, and CHEM 1121L).

These changes will result in reducing the number of hours in the eight semester plan from 132 to 128 semester hours.

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.)

Items (1) through (4) are proposed to address degree content changes required by ACT 747.

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.

Chemical Engineering B.S.Ch.E. Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Chemical Engineering degree. 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 wishing to follow the eight-semester degree plan should see page 43 in the Academic Regulations chapter for university requirements of the program.

Fall Semester Year 1

4 MATH 2554 Calculus I

- 3 CHEM 1103 University Chemistry I
- 3 CHEM 1113 Chemistry for Engineers I
- 3 ENGL 1013 Composition I
- 4 PHYS 2054 University Physics I 6 GNEG 1111 Introduction to Engineer
- 1GNEG 1111 Introduction to Engineering I15Semester hours

- Spring Semester Year 1
 - 1
- 4 MATH 2564 Calculus II
- 3 CHEM 1123 University Chemistry II
- 1 CHEM 1121L University Chemistry II Lab
- 3 CHEM 1133 Chem for Engineers II
- 1 CHEM 1131L Chem for Engineers II Lab
- 3 Freshman Science Elective¹
- 1 Freshman Science Elective Lab
- 3 ENGL 1023 Composition II
- 4 PHYS 2074 University Physics II
- 3 Humanities/social science core elective
- 3 HIST 2003 or HIST 2013 or PLSC 2003
- 1 GNEG 1121 Introduction to Engineering II 171615 Semester hours

Fall Semester Year 2

4 MATH 2574 Calculus III 3 CHEM 3603 Organic Chemistry I 1 CHEM 3601L Organic Chemistry I Lab 3 CHEG 1113 2113 Intro. to Chem Engr I 2 CHEG 1212L 2212L Chemical Engr Lab I (HIST 2013 or PLSC 2003 may be HIST 2003 Hist./American People to 1877 substituted.) PHYS 2074 University Physics II 4 Sophomore Science Elective² 181617 Semester hours **Spring Semester Year** 2

Imanities/social science core elective

4	MATH <mark>3404 2584</mark> Differential Equations				
3	CHEM 3613 Organic Chemistry II				
1	CHEM 3611L Organic Chemistry II Lab				
3	CHEG 2123 Intro. to Chem Engr II				
3	CHEG 2133 Fluid Mechanics				
3	CHEG 2313 Thermodynamics of Single Component Systems				
<mark>1817</mark> Semester hours					
Fall	Semester Year 3				
Fall	Semester Year 3				
Fall 3	Semester Year 3 CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I				
3	CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I				
3	CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I CHEG 3143 Heat Transport				
3 3 2	CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I CHEG 3143 Heat Transport CHEG 3232L Chemical Engr Lab II				

Spi	ing Semester Year 3					
3 3 3	3 CHEG 3333 Chem Engr Reactor Design					
 3 ECON 2143 Basic Economics (ECON 2013 Principles of Macro-economi be substituted.) 						
3 Humanities/social science core elective						
3	Social Science Elective (from Univ/State Core List)					
15	Semester hours					
Fal	Semester Year 4					
3	CHEG 4163 Equil Stage Mass Transfer					
3	CHEG 4413 Chem Engr Design I					
3 CHEG 4813 Chemical Process Safety						
3	3 Technical or Advanced Science elective*					
3						
15	15 Semester hours					
Spi	ing Semester Year 4					
2	CHEG 4332L Chem Engr Lab III					
3	CHEG 4423 Auto Process Control					
3	CHEG 4443 Chem Engr Design II					
3	Advanced Science or Chemical Engineering Elective*					
<mark>3</mark>	Humanities/social science core elective					
3	Humanities/social science core elective					
3	Humanities Elective (from Univ/State Core List)					
3	Social Science Elective (from Univ/State Core List)					
17	Semester hours					
132	128 Total hours					

¹CHEM 1133 and corresponding laboratory (CHEM 1133L) is preferred, or PHYS 2074. Both courses are required for the degree.

²PHYS 2074 is preferred, or CHEM 1133 and corresponding laboratory (CHEM 1133L).

* Technical Elective Options in Chemical Engineering

Each student in chemical engineering is required to complete three semester hours of technical or Advanced Science electives, three semester hours of Advanced Science or Chemical Engineering electives. Technical, Advanced Science, and Chemical Engineering elective courses must be selected from a faculty-approved list of courses found in the department's Undergraduate Advising Manual, which is available on the department's Web site at http://www.cheg.uark.edu. An undergraduate education in chemical engineering provides a firm foundation for many areas of expertise. As discussed in the department's Undergraduate Advising Manual, students can select elective courses to better prepare for employment or further study in areas such as:

- Biotechnology
- Biomedical engineering
- Environmental engineering
- Food process engineering
- Materials engineering
- Microelectronics
- Nuclear engineering
- Pre-medicine
- Simulation and optimization

Additional opportunities are available to enhance the educational experience of students in these areas. Students should consult their academic adviser for recommendations.

See Page 323 for Chemical Engineering (CHEG) courses.

PGRM	SUBJ	CIP	CRTS					
DGRE	PGCT	OFFC&CRTY VALID						
REPORTING CODES								
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