## 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: Approvals

| Department / Program Chair | Date Submitted |
| :--- | :--- |
| College Dean | Date |
| Honors College Dean | Date |
| Core Curriculum Committee | Date |
| University Course and Programs Committee | Date |


| Graduate Council Chair | Date |
| :--- | :---: |
| Faculty Senate Chair | Date |
| Provost | Date |
| Board of Trustees Approval/Notification Date |  |
| Arkansas Higher Education Coordinating Board Approval/Notification Date |  |

SECTION II: Profile Data - Required Information and Name Change Information

| Academic Unit: | $\boxtimes$ Major/Field of Study | $\square$ Minor | $\square$ Other Unit |  |
| :--- | :--- | :--- | :--- | :--- |
| Level: | $\boxtimes$ Undergraduate | $\square$ Graduate | $\square$ Law | $\square$ Policy |
|  |  | Effective Catalog Year |  |  |

Program changes are effective with the next available catalog. See Academic Policy Series 1622.20
Current Name BSChE, Bachelor of Science in Chemical Engineering
College, School, Division ENGR Department Code CHEG
Current Code ( 6 digit Alpha) CHEGBS Proposed Code (6 digit Alpha)
$\square$ Interdisciplinary Program
Prior approval from the Office of the Registrar is required.
CIP Code $\mathbf{1 4 . 0 7 0 1}$
Prior assignment from Office of Institutional Research is required.
Proposed Name
When a program name is changed, enrollment of current students reflects the new name.

## 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.aspxProgram 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: $\qquad$

SECTION IV: Eliminate an Existing Program/Unit
Code/Name $\qquad$ Effective Catalog Year $\qquad$
No new students admitted to program after Term: $\qquad$ Year: $\qquad$
Allow students in program to complete under this program until Term: $\qquad$ Year: $\qquad$

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

Insert here a statement of the exact changes to be made: There are eight changes to be made to the CHEGBS. (1) Change the eight hour requirement of upper elective chemistry electives to six hours. (2) A course in biochemistry will be required (either CHEM 3813 or CHEM 4813H). (3) Eliminate MEEG 3013 and MEEG 2003 from the curriculum. (4) Add a new

## These changes will not result in the addition of hours, currently at 132, to the CHEGBS.

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: $\qquad$
$\square$ 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: $\qquad$
Check all the boxes that apply and complete the required sections of the form:
$\square$ 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.)
$\square$ 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.)
Change in Program Policies

## 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 (8) are proposed in order to address degree content changes based on information collected via alumni surveys, senior exit interviews, and a study of the preparation of entering students.

## 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 and a suggested sequence for students who do not enter the College through the Freshman Engineering Program. 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. Entering freshmen will be required to participate in selected Freshman Engineering Student Services.

Fall Semester Year 1

```
MATH 2554 Calculus I
    CHEM }1103\mathrm{ University Chemistry I
    CHEG 1212L Chemical Engr Lab I
    ENGL }1013\mathrm{ Composition I
    HIST 2003 Hist./American People to 1877 (HIST 2013 or PLSC 2003 may be
        substituted.)
    Semester hours
```


## Spring Semester Year 1

```
MATH 2564 Calculus II
CHEM 1123 University Chemistry II
CHEM 1121L University Chemistry II Lab
CHEG }1113\mathrm{ Intro. to Chem Engr I
ENGL 1023 Composition II
Humanities/social science core elective
Semester hours
```

Fall Semester Year 2

```
MATH 2574 Calculus III
    CHEM 3603 Organic Chemistry I
    CHEM 3601L Organic Chemistry I Lab
    PHYS 2054 University Physics I
    CHEG 11232123 Intro. to Chem Engr II
CHEG 2221 Professional Practice Seminar
    CHEG }2133\mathrm{ Fluid Mechanics
    Semester hours
```


## Spring Semester Year 2

```
MATH 3404 Differential Equations
CHEM 3613 Organic Chemistry II
CHEM 3611L Organic Chemistry II Lab
PHYS 2074 University Physics II
CHEG 2313 Thermodynamics of Single Component Systems
Humanities/social science core elective
Semester hours
```


## Fall Semester Year 3

3 CHEM or PHYS Advanced Science
Elective*
CHEM 3813 Biochemistry or CHEM 4813H Honors Biochemistry I
CHEG 3143 Heat Transport
CHEG 3232L Chemical Engr Lab II
CHEG 3253 Chem Engr Computer Methods
CHEG 3323 Thermodynamics of Multicomponent Systems
Semester hours
Spring Semester Year 3

```
3
CHEM, PHYS, FDSC, or CHEG Advanced
    Science or Chemical Engineering Elective*
    CHEG 3713 Materials Technology
    CHEG 3333 Chem Engr Reactor Design
    CHEG 3153 Non-Equil Mass Transfer
    ECON 2143 Basic Economics (ECON 2013 Principles of Macro-economics may
        be substituted.)
    Semester hours
```

    Fall Semester Year 4
    CHEG 4163 Equil Stage Mass Transfer
    CHEG 4413 Chem Engr Design I
    CHEG 4813 Chemical Process Safety
    Technical elective*
    Humanities/social science core elective
    Semester hours
    Spring Semester Year 4

```
CHEG 4332L Chem Engr Lab III
    CHEG 4443 Chem Engr Design II
    ELEG 3903 Electric Circuits and Machines
    CHEG 4423 Auto Process Control
    Technical elective*
    Humanities/social science core elective
    Semester hours
    Total hours
```


## * Technical Elective Options in Chemical Engineering

Each student in chemical engineering is required to complete six semester hours of technical electives, three semester hours of Advanced Science electives, and three semester hours of Advanced Science or Chemical Engineering electives. Students may select technical elective courses from upper division (3000 and above) courses in mathematics, engineering, and the sciences with the approval of their adviser. Advanced Science and Chemical Engineering elective courses must be selected from a facultyapproved 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.

## SECTION VIII: Action Recorded by Registrar's Office

PROGRAM INVENTORY/DARS
PGRM $\qquad$ SUBJ $\qquad$ CIP $\qquad$ CRTS $\qquad$
DGRE $\qquad$ PGCT $\qquad$ OFFC\&CRTY VALID $\qquad$

## REPORTING CODES

$\qquad$
$\qquad$ Date $\qquad$

## Distribution

Notification to:
(1) College
(2) Department (3) Admissions (8) Undergraduate Program Committee
(4) Institutional Research
(5) Continuing Education
(6) Graduate School

5/12/08

