# 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           | omitted  | Graduate Council C   | hair                                     | Date         |
|--|--------------------|--|----------------------|--|--------------|
| College Dean   | Date               |  | Faculty Senate Chai  | r  | Date         |
| Honors College Dean  | Date               |  | Provost              |  | Date         |
| Core Curriculum Committee  | Date               |  | Board of Trustees A  | pproval/Notification Date                |              |
| University Course and Programs Committee   | Date               |  | Arkansas Higher Educ | ation Coordinating Board Approval/Notifi | ication Date |
| SECTION II: Profile Data - Requ  | iired Inforr       | nation and N   | ame Change Info      | ormation                                 |              |
| Academic Unit: Major/Fie   | eld of Study       | Minor  | Other Unit           | Policy                                   |              |
| Level: Undergra  | duate              | Graduate   | Law                  | Effective Catalog Year                   |              |
| Program changes are effective with the   | next available     | e catalog. See A   | Academic Policy Se   | ries 1622.20                             |              |
| Current Name BSIE, Indus   | trial Engine       | <u>ering</u>   |                      |  |              |
| College, School, Division ENGR   |                    | Department (   | Code <u>INEG</u>     |  |              |
| Current Code (6 digit Alpha) <b>INEGBS</b>   |                    | Proposed Code (6 digit Alpha) Prior approval from the Office of the Registrar is required. |                      |  |              |
| Interdisciplinary Program  |                    | CIP Code 14.3501 Prior assignment from Office of Institutional Research is required.       |                      |  |              |
| Proposed Name<br>When a program name is changed, enrollment of o   | current students 1 | reflects the new nar   | me.                  |  |              |
| SECTION III: Add a New Progra  | m/Unit             |  |                      |  |              |
| For new program proposals, comple<br>'Criteria and Procedures for Preparing P<br>http://www.adhe.edu/divisions/acade | roposals for N     | New Programs i   | in Arkansas.' ADHI   | Ξ  | cribed in    |
| Program proposal uses cour signature of the dean of the  |                    | •  | •                    | at college dean's office has been i      | notified. Th |
| SECTION IV: Eliminate an Exist   | ing Progran        | n/Unit   |                      |  |              |
| Code/Name Effective Cat  | alog Year          |  |                      |  |              |
| No new students admitted to program af Allow students in program to complete   |                    |  | m: Year:             | <u> </u>                                 |              |

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

Insert here a statement of the exact changes to be made: <u>The College of Engineering is eliminating the requirement for students to complete a minimum of 6 semester hours in the humanities and social sciences at the 3000-level or above as part of the University Core (State Minimum Core). Students will still be required to complete the University Core (State Minimum</u>

# <u>Core</u>). CHEM 1103 University Chemistry 1 is being replaced by CHEM 1113 Chemistry for Engineers 1 in the first semester of the freshman year due to the creation of new course dedicated to engineers.

| 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.)   |
| 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.)

he College of Engineering is eliminating the requirement for students to complete a minimum of 6 semester hours in the humanities and social sciences at the 3000-level or above as part of the University Core (State Minimum Core). The course CHEM 1113 is being created to better address engineering student requirements by the Department of Chem & Bio Chem. Many engineering students only take one semester of chemistry, but many of the topics they need are not taught until UC2 in the regular sequence.

# **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.

### **Industrial Engineering B.S.I.E.**

## **Eight-Semester Degree Program**

The following section contains the list of courses required for the Bachelor of Science in Industrial 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 wishing to follow the eight-semester degree plan should see page 40 in the Academic Regulations chapter for university requirements of the program.

At least 12 hours of technical electives must be selected from INEG courses.

#### Fall Semester Year 1

4 MATH 2554 Calculus I

# 3 CHEM 1113 Chemistry for Engineers I

4 PHYS 2054 University Physics I

1 GNEG 1111 Introduction to Engineering I

3 ENGL 1013 Composition I

15 Semester hours

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

4 MATH 2564 Calculus II

4 Freshman Science elective\*

# 3 HIST 2003 or HIST 2013 or PLSC 2003

1 GNEG 1121 Introduction to Engineering II

3 ENGL 1023 Technical Composition II

15 Semester hours

#### Fall Semester Year 2

2 INEG 2102 Intro to Industrial Engineering

3 INEG 2313 Applied Probability and Statistics for Engineers I

3 INEG 2413 Engineering Economic Analysis

4 MATH 2574 Calculus III

4 CSCE 2004 Programming Foundations I

16 Semester hours

#### **Spring Semester Year 2**

3 INEG 2403 Industrial Cost Analysis

3 INEG 2333 Applied Probability and Statistics for Engineers II

3 INEG 2513 Manufacturing Design

4 MATH 3404 Differential Equations

3 Science Requirement\*\*

16 Semester hours

#### Fall Semester Year 3

3 INEG 3623 Simulation

3 INEG 3713 Methods and Standards

3 MEEG 2003 Statics

3 ELEG 3903 Electric Circuits and Machines

3 Fine Arts (From University/State Core List)

3 Technical Elective

18 Semester hours

## **Spring Semester Year 3**

3 INEG 3613 Introduction to Operations Research

3 INEG 4723 Ergonomics

3 Engineering Science 1: Select one from

MEEG 2303 Introduction to Materials

MEEG 2013 Dynamics

MEEG 3013 Mechanics of Materials

3 Engineering Science Elective 2: Select one from

CHEG 2133 Fluid Mech.

MEEG 2403 Thermo

3 ECON 2143 Basic Economics

3 Technical Elective

18 Semester hours

**Fall Semester Year 4** 

| 3 INEG 4433 Systems Engineering & Manageme        | ent   |
|---|---|
| 3 INEG 4553 Production Planning and Control       |   |
| 3 Technical elective                              |   |
| 3 Technical elective                              |   |
| 3 Social Science (From University/State Core List | <mark>.t)</mark>  |
| 15 Semester hours                                 |   |
| Spring Semester Year 4                            |   |
| 4 INEG 4904 Industrial Engineering Design         |   |
| 3 Technical elective                              |   |
| 3 Technical elective                              |   |
| 3 Humanity (From University/State Core List)      |   |
| 3 Social Science (From University/State Core List | <mark>.t)</mark>  |
| 16 Semester hours                                 |   |
| 129 Total hours required                          |   |
|   |   |
|   | nust be chosen from either CHEM 1133/1131L or PHYS 2074.                              |
|   | HYS 2074 (if CHEM 1123/1121L was chosen as the Freshman Engineering Elective)         |
| Industrial Engineering science electives.         | sen as the Freshman Engineering Science Elective); otherwise see the approved list of |
| industrial Engineering science electives.         |   |
|   |   |
|   |   |
| SECTION VIII: Action Recorded by Reg              | gistrar's Office  |
|   |   |
| PROGRAM INVENTORY/DARS                            |   |
| PGRM SUBJ   | CIP CRTS  |
|   |   |
| DGRE PGCT   | OFFC&CRTY VALID   |
| REPORTING CODES                                   |   |
|   | REQ. DEF.   |
| DDUC DEE  |   |
| PROG. DEF   |   |
| PROG. DEF   | Initials Date   |
| PROG. DEF   | · · · · · · · · · · · · · · · · · · ·   |
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| PROG. DEF Distribution                            | · · · · · · · · · · · · · · · · · · ·   |
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5/12/08