## 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: | $\boxed{\text { Major/Field of Study }}$ | $\square$ Minor | $\square$ Other Unit |
| :--- | :--- | :--- | :--- |
| Level: | $\boxed{\square}$ Undergraduate | $\square$ Graduate | $\square$ Law |

Program changes are effective with the next available catalog. See Academic Policy Series 1622.20
Current Name $\quad \underline{\text { Bachelor of Arts in Computer Science }}$

College, School, Division ENGR
Current Code (6 digit Alpha) CSCEBA
$\square$ Interdisciplinary Program

Department Code CSCE
Proposed Code (6 digit Alpha)
Prior approval from the Office of the Registrar is required.
CIP Code 11.0101
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.' ADHEhttp://www.adhe.edu/divisions/academicaffairs/Pages/aa academicproposals.aspx
$\square$ 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: $\qquad$

## 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: The proposed changes to the BA program are a) delete ENGL 2003
Adv. Composition and replace with ENGL 3053 Tech/Report Writing, b) remove five hours of free electives, $c$ ) change the requirement of (three hours of Fine Arts from Category "A") to a requirement of (three hours of Fine Arts), d) drop the total required hours from 125 to 120.

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: $\qquad$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: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.)
$\square$ 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.)
This proposed change is to meet the new state requirement that BA degrees not have more than 120 hours of required coursework.

## 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.

## COMPUTER SCIENCE AND COMPUTER ENGINEERING (CSCE)

[^0]- Professors Andrews, Deaton, Gauch (J.), Gauch (S.), Li, Panda, Thompson (C.)
- Associate Professors Beavers, Bobda, Di, Parkerson, Thompson (D.)
- Assistant Professors Banerjee, Huang

The faculty of the Computer Science and Computer Engineering Department is engaged in multidisciplinary academic research, course offerings, and student projects in areas such as: networking, data security, low power chip design, Web search, embedded systems, and graphics.

The educational objectives of the department are to produce graduates who are recruited in a competitive market and make valuable contributions to a wide variety of industries, particularly in computer and information technology; succeed in graduate or professional studies; pursue life-long learning and continued professional development; and undertake leadership roles in their profession, in their communities, and in the global society.

The computer engineering degree has required sequences of courses in both hardware and software aspects of computer applications and design. Since almost all of today's complex systems encompass hardware and software elements, computer engineering graduates must acquire the skills required to design, build, and test complex digital systems. At the advanced level, students are exposed to hands-on experience with open-ended problems with opportunities for research and design.

A degree in computer science provides a wide variety of career choices. Computer science graduates can design, implement, or manage computer systems, as well as adapt computers to new applications. Computer science core courses include the fundamentals of programming concepts, data structures, operating systems, algorithms, formal languages, and database management systems.

The Bachelor of Science in the CE and CS programs culminate in a capstone project completed in two consecutive semesters. In the first semester, students form teams and develop a project proposal. In the second semester, students develop, implement, and present the final project.

The Bachelor of Arts in Computer Science degree has the same educational objectives as the Bachelor of Science degree. However, the course requirements differ greatly to allow students to double major or pursue interests in Geosciences, Information Systems or Mathematics.

Humanities and social science electives are selected from the University Core Requirements listed in the Catalog of Studies.. To satisfy the University Core, all CSCE students are required to take the following 18 hours of humanities/social science courses:

Either PHIL 3103 (Ethics and the Professions) for the Bachelor of Science degree or PHIL 2203 (Logic) for the Bachelor of Arts degree; 3 hours of Fine Arts fromeary"; 3 hours of U.S. History; 9 hours of Social Science

The Undergraduate Handbook Guide has a list of approved basic science, mathematics, and technical electives. Any course not included in these lists requires faculty approvat Undergraduate Curriculum Committee approval.

The Bachelor of Aits in Computer Seiene degree has the same edtueationalobjectives the Bachelor of Seience degree. However, the course requirements differ greatly to allow students to double major or pursue interests in Geoscienees, Information Systems or Mathematies.
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## Computer Science B.A. Eight-Semester Degree Program

The following sections table contains the list of courses required for the Bachelor of Arts in Computer Science (B.A.) degrees with a suggested sequence below.

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.

## Fall Semester Year 1

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CSCE 1013 Explorations in Computing*
    English Composition I
    MATH 2554 Calculus I
    HIST 2003 or HIST 2013 or PLSC 2003
    Social Science elective
    Semester hours
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Spring Semester Year 1
CSCE 2004 Programming Foundations I
ENGL 1023 Technical Composition II
Free elective
Free elective
Fine Arts elective (from University core)
Semester hours
Fall Semester Year 2

| 4 | CSCE 2014 Programming Foundations II |
| :--- | :--- |
| 3 | MATH 2603 Discrete Mathematics |
| 3 | Social Science elective (from University core) |
| 3 | Free elective |
| $\mathbf{3 1}$ | Free elective |
| $\mathbf{1 6}$ | 14Semester hours |
| Spring | Semester Year 2 |
| 3 | ENGL 2003 Advanced Composition_3053 Tech/Report Writing |
| 3 | STAT 2303 Principles of Statistics |
| 3 | Social Science elective (from University core) |
| 3 | Free elective |
| 3 | Free elective |
| $\mathbf{1 5}$ | Semester hours |

## Fall Semester Year 3

CSCE 3193 Programming Paradigms
COMM 1313 Public Speaking
Science elective (from University core)
Free elective
Free elective
Semester hours

| Spring Semester Year 3 |  |
| :--- | :--- |
| 3 | CSCE elective (1) |
| 3 | Study Area (1 ${ }^{\text {st }}$ course) |
| 3 | PHIL 2203 Logic |
| 3 | Free elective (3000-level or higher) |
| 3 | Free elective |
| $\mathbf{1 5}$ | Semester hours |

Fall Semester Year 4

| 3 | CSCE elective (2) |
| :--- | :--- |
| 3 | Study Area (2 |
| 4 | Science elective (from University core) |
| 3 | Free elective (3000-level or higher) |
| 3 | Free elective |
| 16 13Semester hours |  |
| Spring Semester Year 4 |  |
| 3 | CSCE elective (3) |
| 3 | Study Area (3 |
| 3 | CSCE elective (3000-level or above) |
| 3 | Free elective |
| 3 | CSCE elective (3000-level or above) |
| $\mathbf{1 5}$ | Semester hours |
| $\mathbf{1 2 5}$ |  |

*Students who have sufficient background in programming may substitute three hours of CSCE 2000+ coursework for CSCE 1013

Study Areas (must meet all requirements of one and only one study area):
Computer Science - additional CSCE courses 2000-level or above
Enterprise Resource Planning - WCOB 4213, WCOB 4223, ISYS 4233**
Enterprise Systems - WCOB 4213, ISYS 4453, ISYS 4463
Business Applications WCOB 4213, ISYS 3293, ISYS 3393
Mathematics - MATH 3083, MATH 3103, MATH 4253, MATH 4353, or MATH 4363
Geoinformatics - GEOS 3543 and two of the following: GEOS 4413, GEOS 4553, GEOS 4583, GEOS 4593, GEOS 4863
**Students who complete the Enterprise Resource Planning sequence will receive a SAP certificate

## Degree Program Changes

Students must meet all requirements of their degree programs and are expected to keep informed concerning current regulations, policies, and program requirements in their fields of study. Changes made in the curriculum at a level beyond that at which a student is enrolled might become graduation requirements for that student. Changes made in the curriculum at a level lower than the one at which a student is enrolled are not required of that student. Students should consult their departmental adviser for additional information.

## Requirements for a Minor in Computer Science:

CSCE 2004, CSCE 2014, CSCE 3193, and three additional CSCE courses numbered above 2000.

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

PROGRAM INVENTORY/DARS

| PGRM | SUBJ | CIP | CRTS |
| :---: | :---: | :---: | :---: |
| DGRE | PGCT | OFF |  |

REPORTING CODES
PROG. DEF. $\qquad$ REQ. DEF.
Initials $\qquad$ Date $\qquad$

## Distribution

Notification to: (1) College
(7) Treasurer
(4) Institutional Research
(5) Continuing Education
(6) Graduate School


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