

## ATTACHMENT 2A-1

### LETTER OF NOTIFICATION – 11R

#### Revision of Existing Degree Program (Act 747)

1. Institution submitting request: University of Arkansas, Fayetteville
2. Contact Person/title: Sharon Gaber, Provost and Vice Chancellor for Academic Affairs
3. Title of Degree Program: Bachelor of Arts in Computer Science
4. CIP Code: 11.0101
5. Degree Code: 1350
6. Effective Date: Fall 2013
7. Reason for Proposed Change: Compliance with Act 747
8. Provide **current** and **revised** curriculum outline. (Indicate total credit hours for current degree and total credit hours for revised degree.)

Current Degree: 125 hours  
Revised Degree: 120 hours

See attached for current curriculum, showing revisions with track changes. In summary, five credit hours of free electives were removed from the program to make it compliant with Act 747 and ENGL 2003, Advanced Composition was replaced with ENGL 3053, Tech/Report Writing.

9. Institutional curriculum committee review/approval date for revised degree: \_\_\_\_\_
10. Provide additional Information requested by ADHE staff.

President/Chancellor Approval Date: \_\_\_\_\_

Board of Trustees Notification Date: \_\_\_\_\_

Chief Academic Officer:

Date:

## COMPUTER SCIENCE AND COMPUTER ENGINEERING (CSCE)

Susan Gauch  
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### FACULTY

- 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:

PHIL 3103 (Ethics and the Professions); 3 hours of Fine Arts from category "a"; 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 approval Undergraduate Curriculum Committee approval.

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.

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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**

- 3 CSCE 1013 Explorations in Computing\*
- 3 English Composition I
- 4 MATH 2554 Calculus I
- 3 HIST 2003 or HIST 2013 or PLSC 2003
- 3 Social Science elective

**16 Semester hours****Spring Semester Year 1**

- 4 CSCE 2004 Programming Foundations I
- 3 ENGL 1023 Technical Composition II
- 3 Free elective
- 3 Free elective
- 3 Fine Arts elective (from University core)

**16 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
- 3-1 Free elective

**16 14 Semester hours****Spring Semester Year 2**

- 3 ENGL ~~2002 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

**15 Semester hours****Fall Semester Year 3**

- 3 CSCE 3193 Programming Paradigms
- 3 COMM 1313 Public Speaking
- 4 Science elective (from University core)
- 3 Free elective
- 3 Free elective

**16 Semester hours****Spring Semester Year 3**

- 3 CSCE elective (1)
- 3 Study Area (1<sup>st</sup> course)
- 3 PHIL 2203 Logic
- 3 Free elective (3000-level or higher)
- 3 Free elective

**15 Semester hours****Fall Semester Year 4**

- 3 CSCE elective (2)
- 3 Study Area (2<sup>nd</sup> course)
- 4 Science elective (from University core)
- 3 Free elective (3000-level or higher)

<p>3 Free elective</p> <p><b>16 13 Semester hours</b></p>	
<p><b>Spring Semester Year 4</b></p>	
<p>3 CSCE elective (3)</p> <p>3 Study Area (3<sup>rd</sup> course)</p> <p>3 CSCE elective (3000-level or above)</p> <p>3 Free elective</p> <p>3 CSCE elective (3000-level or above)</p> <p><b>15 Semester hours</b></p>	
<p><b>125 120 Total hours</b></p>	
<p>*Students who have sufficient background in programming may substitute three hours of CSCE 2000+ coursework for CSCE 1013</p>	
<p><b>Study Areas</b> (must meet all requirements of one and only one study area):</p> <p>Computer Science – additional CSCE courses 2000-level or above</p> <p>Enterprise Resource Planning – WCOB 4213, WCOB 4223, ISYS 4233**</p> <p>Enterprise Systems – WCOB 4213, ISYS 4453, ISYS 4463</p> <p>Business Applications WCOB 4213, ISYS 3293, ISYS 3393</p> <p>Mathematics – MATH 3083, MATH 3103, MATH 4253, MATH 4353, or MATH 4363</p> <p>Geoinformatics – GEOS 3543 and two of the following: GEOS 4413, GEOS 4553, GEOS 4583, GEOS 4593, GEOS 4863</p> <p>**Students who complete the Enterprise Resource Planning sequence will receive a SAP certificate</p>	
<p><b>Degree Program Changes</b></p> <p>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.</p>	
<p><b>Requirements for a Minor in Computer Science:</b></p> <p>CSCE 2004, CSCE 2014, CSCE 3193, and three additional CSCE courses numbered above 2000.</p>	