B.S.C.S. in Computer Science

Overview

Degree Requirements

Description
The goal of the B.S.C.S. program is to give each student a thorough professional education in contemporary computer science while allowing sufficient flexibility for the student to pursue individual interests in related technical fields.

Minimum Total Credit Hours: 127

Goals/Mission Statement

Mission Statement
The Department of Computer and Information Science at the University of Mississippi seeks to provide high-quality programs of instruction, research, and service and to refine them continuously to meet the evolving needs of its students and society. Toward this end, the Department shall:

- enable its undergraduate students to master the fundamental principles of computing and to develop the skills needed to solve practical problems using contemporary computer-based technologies and practices;
- empower its graduate students to understand advanced concepts, develop new technologies and methods, and expand the base of fundamental knowledge;
- cultivate a community of professionals that encourages scholarship and facilitates both applied and theoretical research;
- serve its constituents in government, industry, and the public as a resource on state-of-the-art computing science and information technology.

BSCS Program Educational Objectives
As effective members of the Computer Science profession:

1. Graduates demonstrate the ability to solve computing problems commensurate with their levels of professional experience
2. Graduates demonstrate the ability to contribute effectively to the benefit of teams
3. Graduates continue to update their professional knowledge and skills to adapt to changes in technology and the evolving needs of society and the workplace

BSCS Program Outcomes
In keeping with the accreditation of the BSCS program by ABET, Inc., the Department helps students achieve:

- An ability to apply knowledge of computing and mathematics that are appropriate to the discipline;
- An ability to analyze a problem and to identify and define the computing requirements appropriate to its solution;
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet requirements;
- An ability to function effectively on teams to accomplish a common goal;
- An understanding of professional, ethical, legal, security, and social issues and responsibilities;
- An ability to communicate effectively with a range of audiences;
- An ability to analyze the local and global impact of computing on individuals, organizations, and society;
- Recognition of the need for, as well as an ability to engage in, continuing professional development;
- An ability to use current techniques, skills, and tools necessary for computing practice;
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design decisions;
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