

# COMPUTER SCIENCE MAJOR (B.S.)

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## Purpose

The purpose of the Bachelor of Science in Computer Science major is to prepare students for success in one of the world's fastest-growing professions. With several tracts to choose from including software engineering, cybersecurity, data science, and web and mobile programming, students will learn to design and implement software, secure systems, devise new ways to use computers, and develop more effective solutions to computing challenges all from a biblical worldview.

## Program Learning Outcomes

The student will be able to:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.
- Conduct best practices in Computer Sciences while maintaining a Christian worldview.

## Program Educational Objectives

Our goal is, within a few years of graduating, our Computer Science students will be able to:

1. Apply innovation, entrepreneurial activities, and contributions to the discipline of computer science.
2. Identify and document requirements, develop designs, as well as implement and validate quality computer science solutions.
3. Exhibit a commitment to continuous life-long learning.
4. Apply leadership skills in obtaining mission objectives and training the workforce.

## Additional Information

### Cognates

Under the Computer Science major we offer five cognates.

- General
- Software Engineering
- Web and Mobile Programming
- Cybersecurity
- Data Science

Each of these are shown under the Program of Studies (p. 1) tab.

## Programs of Study Delivery Format: Residential Only

- Computer Science (B.S.) - Cyber Security - Resident
- Computer Science (B.S.) - Data Science - Resident
- Computer Science (B.S.) - General - Resident
- Computer Science (B.S.) - Software Engineering - Resident
- Computer Science (B.S.) - Web & Mobile Programming - Resident

## Career Opportunities

- Computer Engineers
- Computer Programmers
- Computer Scientists
- Database Administrators
- Operations Research
- Systems Analysts
- Teaching in Private Schools & Public Schools