Computer Science & Information Systems

VIRGINIA WESLEYAN UNIVERSITY

JOAN P. BROCK SCHOOL OF MATHEMATICS AND NATURAL SCIENCES

Computer science is a discipline involving the analysis, design, implementation, and maintenance of computer software systems. The computer information systems curriculum focuses on the computer-based data collection, storage, retrieval, and information processing/applications in various areas.

THE PROGRAM

The mission of the Department of Computer Science and Information Systems to provide basic instruction in end-user skills for all students and in-depth instruction in theory and applications for computer science and computer information systems majors.

THE MAJOR

The computer science program includes programming and software design, algorithms, system architectures, operating systems, language theory, databases, and online information systems design. Computer science courses are designed to prepare students for a lifetime of learning that will enable them to move beyond current technology to meet the challenges of the future. The computer information systems (CIS) program prepares students with computer programming, data structures, statistics, and studies on various types of information systems. The cybersecurity concentration in the CIS program provides students with an opportunity to pursue a career in a related field after graduation.

THE COURSES

Classes at Virginia Wesleyan are small and interactive. Some of the courses within the computer science program include: Python Programming, Programming with Visual Basic, Computer Programming I and II (Java), Data Structures, Computer Systems, Operating Systems, Cybersecurity Principles, Programming Languages, Topics on Online Databases, and Data Science Using Python.

INTERNSHIPS/RESEARCH

The courses of independent research projects and internship are offered for students to apply their classroom learning and solve real-world problems. Students have the opportunities (including Naval Base and NASA) to conduct original research in an area of interest. Students work closely with one or more members of the department faculty to develop and conduct a research project, and then present their findings during the semester's undergraduate research symposium or at PORT Day. Many student research papers have been presented at international conferences and published in the conference proceedings.

BEYOND THE CLASSROOM

Career options include software engineer and developer, programmer, system analyst, computer administrator, information technology (IT) technician, cybersecurity specialist, and systems consultant.

CONTACT INFORMATION

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