COMPUTER SCIENCE AND INFORMATION SYSTEMS

Faculty: Professors Nikolopoulos, Wang (Chair); Associate Professors Baniya, Byerly, Hawkins; Assistant Professors Abdelfattah, Ali, Khairunnesa, Mahmud, Mandava; Lecturers Brennan, Williams; Assistant Professor in Residence Du.

The department offers baccalaureate degree programs in Computer Science (https://catalog.bradley.edu/undergraduate/programs/computer-science-major/) and in Computer Information Systems (https://catalog.bradley.edu/undergraduate/programs/computer-information-systems-major/), with concentrations available in a) Computer Game Technology b) Mobile Computing, c) Software, Web, and computer Security, and d) Data Science. Minors in Computer Science and Information Systems (https://catalog.bradley.edu/undergraduate/programs/computer-science-information-systems-minor/), Data Science (https://catalog.bradley.edu/undergraduate/programs/data-science-minor/), and Computer Game Technology (https://catalog.bradley.edu/undergraduate/programs/computer-game-technology-minor/) are also offered.

Computer science is the study of theoretical and algorithmic foundations used in computer systems. Students are trained to analyze requirements, design, develop, and test software systems, devise new innovations and applications in computing, and solve scientific, engineering, and business problems requiring computer applications.

Computer information systems is a discipline that focuses on information technology and its applications, i.e., on methods, technology, and tools to generate, process, modify, store, retrieve, and distribute information. Computer information systems has a wide variety of applications, but the mathematical requirements are not as rigorous as they are for computer science because there is less focus on theoretical and algorithmic foundations.

Computer science and computer information systems graduates are employed by a variety of industries and non-profit organizations as software engineers and/or developers, system administrators and/or developers, system analysts, network administrators, Web developers and/or technologists, software test engineers, and database administrators and/or developers.

For students not majoring in the department, we offer three minors which can be tailored to the individual's goals and needs.

Students intending to take only one course in the department should enroll in CS 100 Introduction to Programming Concepts and Languages if they desire a detailed treatment of a programming language, or CIS 300 Computers and Society if they desire a general discussion of computers and their impact on society.