



COLLEGE OF
BUSINESS
ADMINISTRATION

Computer Science

“The Bachelor of Science in computer science degree program offers students a more technical degree. Alternatively, the Computer Information Systems option is available to students pursuing the Bachelor of Science in business administration degree.”

The Major

The Bachelor of Science (B.S.) in computer science degree at Winthrop University includes both studying the theory of advanced computing concepts as well as the application of current technologies to a wide range of computing problems. Graduates from this program are equally well prepared either to enter graduate school or obtain entry-level software development positions. Coursework includes about 15 courses in computer science. Some of the topics include programming, web application design, databases, networks and security, computer architecture, algorithm analysis, operating systems, software engineering, and social implications of computing. Computer science majors must also complete several science and math courses.

The Computer Information Systems Option

The computer information systems option of the B.S. business degree combines seven computer courses with the twelve-course business core. Business core courses include topics such as accounting, finance, management, and marketing. Computing topics include programming, databases, software project management, and advanced computing electives.

Related Program

The B.S. in information design program combines unique coursework from four different fields: computer science, marketing, graphic design, and mass communication. The information design degree is well suited for those students seeking careers that focus on content design, marketing techniques, and/or software development for the internet and the World Wide Web.

Careers

The current demand in the U.S. and the Carolinas for college graduates with computing degrees is very high, and demand is expected to increase. According to the U.S. Department of Labor, “Computer software engineers are projected to be one of the fastest growing occupations over the 2004-14

period.” Media organizations such as Money Magazine and CNN consistently rate several computing careers in their annual lists of “Best Jobs.”

Graduates from Winthrop’s computer science program are highly recruited. Many of our computer information systems graduates go to work for financial institutions in the Charlotte area. While some computer science graduates elect to further their education via graduate school, most of our computer science graduates either take positions in the IT departments of large to small corporations, or they go to work for regionally located software development companies. Starting job titles include software programmer, systems analyst, network manager, database designer, and software testing specialist. Our graduates regularly earn excellent starting salaries.

Internships/Co-ops

Internship opportunities are available to both computer science and computer information systems students. An internship is a great way to gain valuable experience, build a resume, and earn extra money for school. Internships often serve as a stepping stone to a full-time career. In addition to internships, many other part-time jobs in the area are available to students with computing skills.

Groups/Professional Organizations

Beta Gamma Sigma, the national scholastic honorary society for students of business administration, and Upsilon Pi Epsilon (Beta chapter of South Carolina), the national collegiate honor society for the computing sciences, are available to high-achieving students. Winthrop also has a student chapter of the Association for Computing Machinery (ACM). The chapter sponsors social events, lectures by Winthrop faculty and, in association with Clemson and Furman universities, lectures by ACM National Lecturers. The College of Business Administration sponsors a chapter of Beta Alpha Psi, the national honors fraternity for financial information professionals.

For more information, contact:

Dr. R. Stephen Dannelly,
Chair, Computer Science and
Quantitative Methods
College of Business
Administration
Thurmond Building
Rock Hill, SC 29733
803/323-4811
Fax: 803/323-3960
dannellys@winthrop.edu

Facilities

Within the Division of Computing and Information Technology, academic computing provides access to diverse computing resources. These resources include Linux workstations and file servers, Microsoft Windows networks and computer laboratories, and access to a VMS system supporting an Oracle database system. More than 20 computer laboratories supporting PC, Macintosh and Linux systems are available on campus for open access and instructional needs.

Winthrop's host computers have an assortment of programming languages such as Visual Basic, C, C++, COBOL, Fortran, Java, LISP, and Pascal. Microcomputer networks and laboratories provide computing resources for support of instructional and research applications. Typical applications include desktop publishing, database management, spreadsheet analysis, graphics, communications, word processing, statistical analysis, and mathematical computation. Specific applications include Microsoft Office Premium, Frontpage, Internet Explorer, PCSAS, SPSS, Mathematica, and Microsoft Visual Studio.

All central campus buildings and residence halls are connected to the campus network and Internet through fiber optic cable. Students are provided with consolidated computing services including Web-based e-mail, central server storage space, and personal Web pages.

The Academic Computing Center also provides computer access for visually impaired students.

Faculty

The business administration and computer science faculty at Winthrop is highly dedicated to teaching. A high level of knowledge of their specialty areas, combined with "real world" experience serves to benefit their students.

Members of the faculty have won Winthrop's Distinguished Professor, Outstanding Junior Professor, and Excellence in Teaching Awards. They are also involved in active research, participate in a variety of professional activities, and volunteer in the Rock Hill community. Computer science and business administration majors have plenty of opportunities to interact with their professors and establish the contacts that they will need for advanced study and employment.

Mission of CBA

Our mission is to prepare students in a learning-centered environment, through effective teaching, scholarship, and service, with the professional and leadership skills necessary for positions in the global marketplace, while fostering life-long learning and service to the external community.

Accreditation

Accreditation is a voluntary, non-governmental, peer-review process that assures the quality of the education students receive. The B.S. in computer science degree program is accredited by the Computing Accreditation Commission of ABET. The B.S. in business administration, including the computer information systems option, is accredited by AACSB International. Both ABET and AACSB are the premiere accrediting bodies for those types of degree programs.



For more information, contact:

Dr. R. Stephen Dannelly, Chair
Computer Science and
Quantitative Methods
College of Business Administration
Thurmond Building
Rock Hill, SC 29733
Phone: 803/323-4811
Fax: 803/323-3960
dannelly@winthrop.edu