

Computing and Information Technology

The Computing and Information Technology (CMIT) major is designed to prepare students for careers in computing or information technology. Students who complete the requirements for the Computing and Information Technology major will obtain a background in the concepts of computer science and computer programming, an in-depth focus on computer software or hardware, and a set of advanced courses that will allow them to pursue employment in a large number of fields that require a strong information technology background.

The Degree Program

The Bachelor of Science degree is offered in Computing and Information Technology.

Related Major Skills

- programming language concepts
- technology skills such as database, security, networking, hardware
- theoretical skills in usability and understanding
- mathematical skills
- problem-solving
- organizing/simplifying
- logical and critical thinking
- planning and management
- reasoning
- ability to work in teams

Prerequisites

BUS 141: Introduction to Computers or equivalent knowledge and skill

Required Courses

The major consists of a minimum of 9 courses (36 credit hours).

- **Three (3) required courses:**
 - CMIT 140: Introduction to Computer Programming
 - CMIT 141: Advanced Programming
 - CMIT 221: Foundations in Information Systems
- **Choice of focus:**
 - Software Engineering Focus:
 - CMIT 201: Data Structures
 - CMIT 340: Software Engineering
 - Information Technology Focus:
 - CMIT 321: Operating Systems
 - CMIT 322: (Inter)Networking Computers
- **Three (3) CMIT elective courses** (two must be at the 300 level or higher) or approved elective courses from other majors
- **CMIT 401: Artificial Intelligence**

Departmental Areas of Study

- Computer hardware and operating systems (e.g., CMIT 321: Operating Systems)
- Networking and telecommunications (e.g., CMIT 322: [Inter]Networking Computers)
- Special topics in computing and computer programming listed as CMIT 250, 350 or 450
- Theory and implementation of database management systems (e.g., CMIT 342: Database Systems)

Possible Career Choices

Look at what some of our graduates are doing:

Computer Programmer
Database Administrator
Database Designer
Director of IT
Help Desk Specialist
IT Auditor
IT Consultant
Network Administrator
System and/or Data Modeler
Software Engineer
Technical Trainer
Technical Writer
Web Developer

Faculty

Christopher Johnson, Assistant Professor, Chair; cjohnso6@guilford.edu

Rob Whitnell, Associate Professor

Why Enroll in Guilford College's Adult Degree Programs?

- least complicated and lowest cost application
- most convenient location on W. Friendly Ave. with easy access from I-40, Bryan Boulevard, and Rtes. 29 & 68
- most convenient schedule (full-time, 2 nights a week or Saturdays only)
- lowest total cost full-time adult degree programs
- transfer credits never expire
- evening-only programs
- unique adult-specific services and personal attention
- dedicated, highly qualified faculty

Degree Programs Offered

Accounting ¹	English	Mathematics
African American Studies ³	Environmental Studies ³	Music
Art	Exercise and Sports Studies	Philosophy
Biology	Forensic Accounting ¹	Peace and Conflict Studies ³
Business Management ¹	Forensic Biology ¹	Physics
Chemistry	French	Political Science ¹
Community and Justice Studies ¹	Geology and Earth Sciences	Psychology ¹
Computer Information Systems ¹	German	Religious Studies
Computing and Information Technology ¹	German Studies	Sociology/Anthropology
Criminal Justice ¹	Health Sciences ³	Spanish
Economics	History ¹	Sport Management
Education Studies ^{2,3}	Integrative Studies	Theatre Studies
	International Studies	Women's Studies ³

¹ Programs can be completed entirely at night.

² Internship/student teaching must be completed in the daytime.

³ Requires a second disciplinary major.