COMPUTER SCIENCE, B.S. - CYBERSECURITY M.S. ACCELERATED PATHWAY

The B.S. in Computer Science (Concentration: Cybersecurity B.S. to M.S. Accelerated Pathway) provides high-achieving students with the opportunity to complete foundational graduate coursework during their senior year of undergraduate study in order to accelerate graduate degree completion. This competitive program allows admitted students the opportunity to complete both their bachelor's degree and the M.S. in Computer Science (Concentration: Cybersecurity Accelerated Pathway) in five years.

The program outline and graduation requirements are listed below. In addition, free electives are selected to reach 120 credits overall and a 3.0 cumulative GPA is required for graduation.

The department website provides an overview of the program, admission requirements (when applicable), faculty biographies, learning outcomes, and careers: https://www.southernct.edu/academics/computer-science/programs

GENERAL EDUCATION REQUIREMENTS

All bachelor’s degree programs include liberal education (LEP) and writing (W) course requirements. To review more detailed information regarding these requirements, please visit Degree Requirements >>General Education (LEP) Requirements. Courses in the major and/or cognate may also be used to satisfy LEP requirements where noted below (*).

MAJOR REQUIREMENTS (52 Credits)

3.0 GPA in all major CSC courses required

Computer Science Requirements (40 Credits)
CSC 152 – CS1: Programming Fundamentals
CSC 207 – Computer Systems
CSC 212 – CS2: Data Structures
CSC 229 - Object-Oriented Programming
CSC 235 - Web and Database Development
CSC 265 - Computer Networking and Security I (grade of ‘B’ or better required)
CSC 305 - Computer Organization
CSC 321 - Algorithm Design and Analysis
CSC 324 - Computer Ethics
CSC 330 - Software Design and Development (grade of ‘B’ or better required)
CSC 400 - Computer Science Project Seminar (T3)*
CSC 421 - Theory of Programming Language
CSC 425 - Operating Systems

**Accelerated Pathway Requirements (12 Credits)**
Graduate courses require a grade of 'C' or higher
CSC 540 - Database Systems
CSC 543 - Web Programming
CSC 563 - Multithreaded Distributed Programming
CSC 565 - Computer Network

**COGNATE REQUIREMENTS (30 Credits)**

MAT 150 – Calculus I (T1QR)*
MAT 151 – Calculus II
MAT 178 – Elementary Discrete Mathematics
MAT 221 – Intermediate Applied Statistics

Select one from:
MAT 252 - Calculus III
MAT 322 - Numerical Analysis
PHY 355 - Electricity and Electronics

Select one from (T2LE)*:
BIO 100 – General Zoology
BIO 101 – General Botany
BIO 103 – Biology I
BIO 120 – Microbiology
BIO 200 – Human Biology I
BIO 201 - Human Biology II
ESC 201 – Historical Geology

Select one from (T2PR)*:
CHE 120 - General Chemistry I
ESC 200 - Physical Geology
PHY 200 - General Physics I
PHY 230 - Physics for Scientists and Engineers I

Select one from:
CHE 121 - General Chemistry I
ESC 210 - Principles of Astronomy
PHY 201 - General Physics II
PHY 231 - Physics for Scientists and Engineers II