

BACHELOR OF ARTS
GRADUATION REQUIREMENTS

THE STUDENT MUST DO THE FOLLOWING TO RECEIVE A BACHELOR OF ARTS DEGREE:

1. COMPLETE A MINIMUM OF 120 CREDIT HOURS OF STUDY, AT LEAST 60 OF WHICH OR AT LEAST THE LAST 30 CREDITS BEFORE GRADUATION ARE AT SOUTHERN VIRGINIA. NO MORE THAN 9 CREDIT HOURS WILL BE GRANTED FOR INTERNSHIP COURSES.
2. COMPLETE ALL REQUIREMENTS OF THE SOUTHERN VIRGINIA CORE.
3. COMPLETE ALL REQUIREMENTS OF AT LEAST ONE MAJOR.
4. EARN A MINIMUM GRADE POINT AVERAGE OF 2.00 ON ALL COURSE WORK TAKEN AT THE UNIVERSITY.
5. COMPLY WITH ALL UNIVERSITY STANDARDS, REGULATIONS, AND PROCEDURES, FROM THE DATE OF MATRICULATION THROUGH THE DATE OF FINAL GRADUATION.

COMPUTER SCIENCE
MAJOR REQUIREMENTS

Computer science is the systematic study of computational systems and computability. It includes theories for understanding the analysis, design, implementation, validation and verification of solutions to complex problems, and for the elicitation, representation, manipulation and visualization of knowledge. More simply put, computer scientists learn to understand what a computer can and cannot do, how computers can efficiently perform specific tasks, how computers can store and retrieve specific types of information, how computers can most effectively organize and display information, and how computers can appear to behave intelligently. Building on the core ideas of a liberal education, the computer science major combines theory with practical experiences to develop skills in problem solving, programming, communication, and collaboration in order to help students realize their potential to assume leadership roles in an increasingly technical world. Computer science majors can prepare for careers in research, development and teaching by pursuing graduate degrees, or they can apply their skills in virtually any industry, from business to biochemistry, and from education to entertainment.

Major Requirements (35 credit hours)

Major Core (20 credit hours):

CSC 120 Programing Fundamentals (GE)(3)
CSC 220 Data Structures & Algorithms (3)
CSC 222 Discrete Mathematics (3)
CSC 230 Computer Organization (3)
CSC 240 Theory of Computation (3)
CSC 250 Software Engineering (3)
CSC 498 Senior Capstone (2)

Electives I (9-15 credits from among the following)

CSC 210 Advanced Web Authoring (3)
CSC 330 Operating Systems (3)
CSC 332 Networking Systems (3)
CSC 334 Programming Languages (3)
CSC 340 Artificial Intelligence (3)
CSC 342 Cyber Security (3)
CSC 350 Database Systems (3)
CSC 352 Platform Development (3)

Electives II: (0-6 credit hours from among the following)

CSC 110 Authoring for the Web (3)
CSC 375R Topics in Computer Science (3)
CSC 385R Directed Study in Computer Science (3)
MAT 221 Statistics (3)
MAT 341 Calculus III (3)
MAT 343 Linear Algebra (3)
PHI 223 Introduction to Logic (3)
PHI 325R Intermediate Logic (3)