# **Computer Science Major**

### Area of Emphasis

Students must complete requirements in one of the following areas of emphasis:

- Information Assurance and Security
- Software Engineering

### Information Assurance and Security

Code	Title	Credits
Supporting Courses		31
COMP SCI 201	Introduction to Computing & Internet Technologies	
COMP SCI 221	Database Design & Management	
COMP SCI 231	Introduction to IT Operations	
COMP SCI 240	Discrete Mathematics	
COMP SCI 256	Introduction to Software Design	
COMP SCI 292	Introduction to Mobile Platforms and Apps	
MATH 202	Calculus and Analytic Geometry I	
MATH 260	Introductory Statistics	
Choose 1 of These COMM Courses:		
COMM 133	Fundamentals of Public Address	
COMM 166	Fundamentals of Interpersonal Communication	
COMM 237	Small Group Communication	
Information Assurance and Security Emphasis		33
COMP SCI 316	Advanced Software Design	
COMP SCI 351	Data Structures	
COMP SCI 353	Computer Architecture and Organization	
COMP SCI 358	Data Communication and Computer Networks	
COMP SCI 361	Information Assurance and Security	
COMP SCI 371	Advanced Object-Oriented Design	
COMP SCI 452	Operating Systems Using Linux	
COMP SCI 464	Artificial Intelligence	
COMP SCI 490	Capstone Essay in Computer Science	
+3 credits upper level in COMP SCI, MATH, INFO SCI or COMM		
Total Credits		64

## Software Engineering

Code Supporting Courses	Title	Credits 31
COMP SCI 201	Introduction to Computing & Internet Technologies	51
COMP SCI 221	Database Design & Management	
COMP SCI 231	Introduction to IT Operations	
COMP SCI 240	Discrete Mathematics	
COMP SCI 256	Introduction to Software Design	
COMP SCI 292	Introduction to Mobile Platforms and Apps	
MATH 202	Calculus and Analytic Geometry I	
MATH 260	Introductory Statistics	
Choose 1 of These COMM Courses:		
COMM 133	Fundamentals of Public Address	
COMM 166	Fundamentals of Interpersonal Communication	
COMM 237	Small Group Communication	

#### Software Engineering Emphasis

Software Engineering Emphasis		33
COMP SCI 316	Advanced Software Design	
COMP SCI 351	Data Structures	
COMP SCI 353	Computer Architecture and Organization	
COMP SCI 357	Theory of Programming Languages	
COMP SCI 371	Advanced Object-Oriented Design	
COMP SCI 372	Software Engineering	
COMP SCI 450	Theory of Algorithms	
COMP SCI 452	Operating Systems Using Linux	
COMP SCI 464	Artificial Intelligence	
+3 credits upper level COMP SCI, MATH, INFO SCI or COMM		

**Total Credits** 

64