

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 | 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 | |

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|---|--|-----------|
| 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 |