

COMPUTER SCIENCE MAJOR

Requirements in a Major in Computer Science

Bachelor of Science

| Code | Title | Hours |
|---|-------------------------------------|-------|
| Required Courses | | |
| CSCI 111 | Introduction to Computer Science | 4 |
| CSCI 112 | Data Structures | 4 |
| CSCI 210 | Introduction to Discrete Structures | 3 |
| or MATH 220 | Discrete Mathematics | |
| CSCI 211 | Computer Organization | 3 |
| CSCI 212 | Systems Programming | 4 |
| CSCI 213 | Object-Oriented Programming | 4 |
| CSCI 311 | Algorithms | 3 |
| Programming Emphasis | | |
| Select one of the following: | | 3 |
| CSCI 330 | Computer Networks and Security | |
| CSCI 332 | Computer Graphics | |
| CSCI 335 | Web Development | |
| CSCI 340 | Parallel Computing | |
| CSCI 350 | Operating Systems | |
| CSCI 382 | Special Topics in Computer Science | |
| Mathematical Emphasis | | |
| Select one of the following: | | 3-4 |
| MATH 107 | Introduction to Math Modeling | |
| MATH 111 | Introduction to Statistics | |
| MATH 113 | Introduction to Statistics | |
| MATH 120 | Introductory Logic | |
| MATH 131 | Calculus I | |
| CSEC 321 | Cryptography | |
| CSCI 363 | Theory of Computation | |
| CSCI 383 | Special Topics in Computer Science | |
| Electives | | |
| Select three additional courses from the following: | | 9 |
| CSCI 229 | Introduction to Robotics | |
| CSCI 236 | Database Systems | |
| CSCI 281 | Special Topics in Computer Science | |
| CSCI 330 | Computer Networks and Security | |
| CSCI 332 | Computer Graphics | |
| CSCI 333 | Programming Languages | |
| CSCI 335 | Web Development | |
| CSCI 339 | Artificial Intelligence | |
| CSCI 340 | Parallel Computing | |
| CSCI 350 | Operating Systems | |
| CSCI 363 | Theory of Computation | |
| CSCI 381 | Special Topics in Computer Science | |
| CSCI 382 | Special Topics in Computer Science | |
| CSCI 383 | Special Topics in Computer Science | |
| CSCI 395 | Seminar | |
| CSCI 485 | Computer Science Research | |

One of the following may be included as an elective:

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| CSEC 321 | Cryptography |
| CSEC 322 | System Security |
| CSEC 323 | Software Security |

One of the following may be included as an elective:

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| MATH 213 | Elementary Linear Algebra |
| MATH 330 | Graph Theory |
| MATH 350 | Game Theory |
| PHYS 210 | Digital Electronics |

Total Hours **40-41**