

# Computer Science Minor

## Computer Science Minor Requirements

18 credits

| Code                                       | Title  | Hours |
|--|--|-------|
| <b>Computer Science Minor Requirements</b> |  |       |
| CS 1400                                    | Fundamentals of Programming                    | 3     |
| CS 1410                                    | Object Oriented Programming                    | 3     |
| CS 2420                                    | Introduction to Algorithms and Data Structures | 3     |
| <b>Computer Science Elective Courses</b>   |  |       |
| Complete 3 courses from the following:     |  |       |
| CS 2100                                    | Discrete Structures                            | 3     |
| CS 2450                                    | Software Engineering                           | 3     |
| CS 2810                                    | Computer Organization and Architecture         | 3     |
| CS 3005                                    | Programming in C++                             | 3     |
| CS 3150                                    | Computer Networks                              | 3     |
| CS 3400                                    | Operating Systems                              | 3     |
| CS 3410                                    | Distributed Systems                            | 3     |
| CS 3500                                    | Game Development                               | 3     |
| CS 3510                                    | Algorithms                                     | 3     |
| CS 3520                                    | Programming Languages                          | 3     |
| CS 3530                                    | Computational Theory                           | 3     |
| CS 3600                                    | Graphics Programming                           | 3     |
| CS 4300                                    | Artificial Intelligence                        | 3     |
| CS 4307                                    | Database Systems                               | 3     |
| CS 4320                                    | Machine Learning                               | 3     |
| CS 4400                                    | Data Mining                                    | 3     |
| CS 4410                                    | Data Visualization                             | 3     |
| CS 4550                                    | Compilers                                      | 3     |
| CS 4990                                    | Special Topics in Computer Science             | 3     |
| SE 3010                                    | Mobile Application Development for Android     | 3     |
| SE 3020                                    | Mobile Application Development for iOS         | 3     |
| SE 3100                                    | Software Practices                             | 3     |
| SE 3150                                    | Software Quality                               | 3     |
| SE 3250                                    | Internet of Things Programming                 | 3     |
| SE 3200                                    | Web Application Development I                  | 3     |
| SE 4200                                    | Web Application Development II                 | 3     |

## Completion Requirements

- Complete all courses that fulfill requirements in the minor with a grade C or higher.

### Notes:

An academic minor is an attribute of a baccalaureate degree, not an entity by itself, and can only be awarded at the same time a student graduates with a bachelor's degree. Students must declare a minor prior to submitting a graduation application. A minor may not be added to a previously awarded degree. Students must complete the minor requirements prior to or concurrent with completion of their bachelor's degree requirements. Minors are not available with associate's degrees.

Students may not declare a minor that is in the same discipline as their major. Example: English majors cannot declare any English minor.

Integrated Studies majors may not have an academic minor in the same discipline as either of their two declared emphases. Example: An Integrated Studies major with emphases in English and Spanish cannot receive a minor in either English or Spanish.