

# Major in Computer Science - Bachelor of Science

| University Requirements:                                                                                                                                                                                                                                                                                                                                                                                                                     |           |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------|
| See University General Requirements for Baccalaureate degrees (p. 41)                                                                                                                                                                                                                                                                                                                                                                        |           | <input type="checkbox"/> |
| First Year Making Connections Course:                                                                                                                                                                                                                                                                                                                                                                                                        | Sem. Hrs. |                          |
| CS 1093, Making Connections - Computer Science                                                                                                                                                                                                                                                                                                                                                                                               | 3         | <input type="checkbox"/> |
| General Education Requirements:                                                                                                                                                                                                                                                                                                                                                                                                              | Sem. Hrs. |                          |
| See General Education Curriculum for Baccalaureate degrees (p. 84)                                                                                                                                                                                                                                                                                                                                                                           | 36        | <input type="checkbox"/> |
| <p><b>Students with this major must take the following:</b></p> <p><i>MATH 2204, Calculus I</i></p> <p><i>PHYS 2034, University Physics I</i> <b>OR</b></p> <p><i>PHYS 2073 AND 2071, Fundamental Physics and Laboratory</i></p> <p><i>ECON 2313, Principles of Macroeconomics</i> <b>OR</b></p> <p><i>ECON 2333, Economic Issues &amp; Concepts</i></p> <p><i>COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)</i></p> |           |                          |
| Major Requirements:                                                                                                                                                                                                                                                                                                                                                                                                                          | Sem. Hrs. |                          |
| CHEM 1013 <b>AND</b> CHEM 1011, General Chemistry I and Laboratory                                                                                                                                                                                                                                                                                                                                                                           | 4         | <input type="checkbox"/> |
| CS 2114, Structured Programming                                                                                                                                                                                                                                                                                                                                                                                                              | 4         | <input type="checkbox"/> |
| CS 2124, OOP and Fundamental Data Structures                                                                                                                                                                                                                                                                                                                                                                                                 | 4         | <input type="checkbox"/> |
| CS 3113, Algorithms and Advanced Data Structures                                                                                                                                                                                                                                                                                                                                                                                             | 3         | <input type="checkbox"/> |
| CS 3123, Programming Languages                                                                                                                                                                                                                                                                                                                                                                                                               | 3         | <input type="checkbox"/> |
| CS 3223, Computer Organization                                                                                                                                                                                                                                                                                                                                                                                                               | 3         | <input type="checkbox"/> |
| CS 3233, Operating Systems                                                                                                                                                                                                                                                                                                                                                                                                                   | 3         | <input type="checkbox"/> |
| CS 4113, Software Engineering                                                                                                                                                                                                                                                                                                                                                                                                                | 3         | <input type="checkbox"/> |
| CS 4143, Java and Application Development                                                                                                                                                                                                                                                                                                                                                                                                    | 3         | <input type="checkbox"/> |
| CS 4543, Database Systems                                                                                                                                                                                                                                                                                                                                                                                                                    | 3         | <input type="checkbox"/> |
| CS 4713, Analysis of Algorithms                                                                                                                                                                                                                                                                                                                                                                                                              | 3         | <input type="checkbox"/> |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------|
| EE 3333 <b>AND</b> EE 3331, Digital Electronics I and Laboratory                                                                                        | 4                | <input type="checkbox"/> |
| ENG 3043, Technical Writing                                                                                                                             | 3                | <input type="checkbox"/> |
| MATH 2183, Discrete Structures                                                                                                                          | 3                | <input type="checkbox"/> |
| MATH 2214, Calculus II                                                                                                                                  | 4                | <input type="checkbox"/> |
| MATH 3243, Linear Algebra                                                                                                                               | 3                | <input type="checkbox"/> |
| PHIL 3723, Computers, Ethics, and Society                                                                                                               | 3                | <input type="checkbox"/> |
| PHYS 2044, University Physics II <b>OR</b><br>PHYS 2083 <b>AND</b> 2081, Fundamental Physics II and Laboratory                                          | 4                | <input type="checkbox"/> |
| STAT 3233, Applied Statistics I                                                                                                                         | 3                | <input type="checkbox"/> |
| Computer Science Electives<br><i>CS 1013 and CS 1114 may not be used to satisfy this requirement. MATH 4533 may be used to satisfy this requirement</i> | 12               | <input type="checkbox"/> |
| <b>Sub-total</b>                                                                                                                                        | <b>75</b>        | <input type="checkbox"/> |
| <b>Electives:</b>                                                                                                                                       | <b>Sem. Hrs.</b> |                          |
| Electives                                                                                                                                               | 6                | <input type="checkbox"/> |
| <b>Total Required Hours:</b>                                                                                                                            | <b>120</b>       |                          |