# BS/MS Bioinformatics Sample Schedule

## Non-thesis Option

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
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</table>
| **Year 1** | General Biology (BIOL 101) (3)  
General Chemistry A (CHEM 101) (3)  
General Chemistry A Lab (CHEM 111) (1)  
Discrete Structures (COMP 163) (3)  
CORE: College Writing Seminar (3)  
Applied Calculus I (MATH 131) (3) | General Chemistry B (CHEM 102) (3)  
General Chemistry B Lab (CHEM 112) (1)  
Introduction to Programming (COMP 170) (3)  
CORE: Artistic Knowledge and Experience (3)  
Applied Calculus II (MATH 132) (3)  
CORE: Theology and Religious Studies Tier 1 (3) |
|       | **Total Credit Hours**: 16                                          | **Total Credit Hours**: 16                                              |
| **Year 2** | Genetics (BIOL 282) (3)  
Genetics Lab (BIOL 283) (1)  
Organic Chemistry A (CHEM 223) (3)  
CORE: Historical Knowledge Tier 1 (3)  
CORE: Theology and Religious Studies Tier 2 (3)  
CORE: Philosophical Knowledge Tier 1 (3) | Genomics (BIOL 387) (3)  
Organic Chemistry B (CHEM 224) (3)  
CORE: Historical Knowledge Tier 2 (3)  
Data Structures (COMP 271) (3)  
CAS Elective (3)  
CORE: Philosophical Knowledge Tier 2 (3) |
|       | **Total Credit Hours**: 16                                          | **Total Credit Hours**: 18                                              |
| **Year 3** | Bioinformatics (BIOL 388) (3)  
Biochemistry (CHEM 361) (3)  
CORE: Literary Knowledge & Experience Tier 1 (3)  
CAS Elective (3)  
CAS Language Requirement 1 (3)  
Undergraduate Capstone (BIOL 397/398/399) (1) | Proteomics (CHEM 365) (3)  
Introduction to Biostatistics (STAT 335) (4)  
CORE: Literary Knowledge & Experience Tier 2 (3)  
CORE: Societal and Cultural Knowledge Tier 1 (3)  
CAS Language Requirement 2 (3)  
* APPLY FOR ACCELERATED PROGRAM * |
|       | **Total Credit Hours**: 16                                          | **Total Credit Hours**: 16                                              |
| **Year 4** | Design and Analysis of Algorithms (COMP 363) (3)  
CORE: Societal and Cultural Knowledge Tier 2 (3)  
CAS Elective (3)  
CAS Elective (3)  
CORE: Ethics (3) | Advanced Bioinformatics (BIOI 500) (2)  
Bioinformatics Seminar (BIOI 501) (1)  
Computational Biology (COMP 488) (4)  
Quant. Bioinformatics (STAT 437) (4)  
Bioinformatics Elective (3) |
|       | **Total Credit Hours**: 15                                          | **Total Credit Hours**: 14                                              |
| **Year 5** | Bioinformatics Elective (3)  
Bioinformatics Elective (3)  
Bioinformatics Elective (3) | Bioinformatics Elective (3)  
Bioinformatics Elective (3)  
Bioinformatics Internship (BIOI 498) (1) |
|       | **Total Credit Hours**: 9                                          | **Total Credit Hours**: 7                                               |

* Bold indicates courses required of the MS degree, totaling 30 credit hours.  
Courses which could be applied towards both BS and MS degree in bold, underline.