| Bachelor of Science in Applied and Computational Mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| To qualify for a Bachelor of Science in Applied and Computational Mathematics, the student must achieve a grade of C or better on all required and elective courses. Courses may be counted toward both Major and General Requirements. However, no course may fulfill two categories of General Requirements. (If you use any course for both Major and General Requirements, be sure to count the credits only ONCE toward the degree total.) |  |  |  |  |
| Course Title | Course Number | Credits | Sem/YR | Senior Review |
| Required Courses (48 credits) |  |  |  |  |
| Calculus I OR Active Calculus I, Calculus II OR Active Calculus II, Calculus III | 640:121 OR 123, 640:122 OR 124, 640:221 | 12 |  |  |
| Linear Algebra OR Linear Algebra with Applications | 640:250 OR 640:253 | 3 |  |  |
| Elements of Physics I AND Lab | 750:131 AND 133 | 4 |  |  |
| Elements of Physics II AND Lab OR General Biology I AND Lab | 750:132 AND 134 OR 120:101 AND 107 | 4 |  |  |
| Programming Fundamentals | 198:111 | 4 |  |  |
| Object-Oriented Programming | 198:113 | 3 |  |  |
| Mathematical Foundations of Computer Science | 198:171 | 3 |  |  |
| Elementary Differential Equations | 640:314 | 3 |  |  |
| Probability and Stochastic Processes OR Applied Probability | 640:331 OR 198:467 | 3 |  |  |
| Data Structures | 198:213 | 3 |  |  |
| Introduction to Computational Mathematics OR Advanced Computational Mathematics | 640:357 OR 640:497 | 3 |  |  |
| Applied Statistics OR Mathematical Statistics | 960:336 OR 960:481 | 3 |  |  |
| Total |  | 48 |  |  |
| Elective Courses (9 credits) |  |  |  |  |
| Any three Mathematics (640), Statistics (960), or Computer Science (198) courses at 400-level |  |  |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
|  |  | 3 |  |  |
| Total Credits |  | 57 |  |  |

