## **Major in Mathematics - Bachelor of Science**

| University Requirements:   |           |   |
|--|-----------|---|
| See University General Requirements for Baccalaureate degrees (p. 41)  |           |   |
| First Year Making Connections Course:  | Sem. Hrs. |   |
| MATH 1093, Making Connections - Mathematics  | 3         | 0 |
| General Education Requirements:  | Sem. Hrs. |   |
| See General Education Curriculum for Baccalaureate degrees (p. 84)   | 36        |   |
| Students with this major must take the following:  MATH 2204, Calculus I  PHYS 2034, University Physics I  Twelve hours in Social Sciences (Required Departmental Gen. Ed. Option), including one of the following:  ANTH 2233, Introduction to Cultural Anthropology  GEOG 2613, Introduction to Geography  HIST 1013, World Civilization to 1660  HIST 1023, World Civilization since 1660 |           |   |
| Major Requirements:  | Sem. Hrs. |   |
| CS 2114, Structured Programming  | 4         | 0 |
| MATH 2183, Discrete Structures   | 3         |   |
| MATH 2214, Calculus II   | 4         | 0 |
| MATH 3254, Calculus III  | 4         | ٥ |
| MATH 3243, Linear Algebra  | 3         | ٥ |
| MATH 3303, Modern Algebra I  | 3         | ٥ |
| MATH 4403, Differential Equations  | 3         | ٥ |
| MATH 4553, Advanced Calculus I   | 3         | 0 |
| PHYS 2044, University Physics II   | 4         | 0 |
| STAT 3233, Applied Statistics I  | 3         | 0 |

| STAT 4453, Probability and Statistics I                             | 3         |   |
|---|-----------|---|
| Select one of the following:  | 3         | 0 |
| MATH 4423, Modern Algebra II  |           |   |
| MATH 4563, Advanced Calculus II                                     |           |   |
| STAT 4463, Probability and Statistics II                            |           |   |
| Mathematics or Statistics Electives (select four of the following): | 12        | 0 |
| MATH 3273, Applied Complex Analysis                                 |           |   |
| MATH 3323, Mathematical Modeling                                    |           |   |
| MATH 3343, College Geometry   |           |   |
| MATH 3353, History of Mathematics                                   |           |   |
| MATH 4423, Modern Algebra II  |           |   |
| If not taken to satisfy Major Requirements                          |           |   |
| MATH 4513, Applied Mathematics                                      |           |   |
| MATH 4533, Numerical Methods  |           |   |
| MATH 4563, Advanced Calculus II                                     |           |   |
| If not taken to satisfy Major Requirements                          |           |   |
| STAT 4463. Probability and Statistics II                            |           |   |
| If not taken to satisfy Major Requirements                          |           |   |
| Sub-total   | 52        |   |
| Electives:  | Sem. Hrs. |   |
| Electives (Eight hours must be upper-level)                         | 29        | 0 |
| Total Required Hours:   | 120       |   |