

**B.S. MATHEMATICS (120 Credits)**  
 Science, Mathematics and Computer Science Department  
 Revised July 2022

**A. CORE REQUIRED COURSES (39 Credits)**

|                                   |                           |                      |
|-----------------------------------|---------------------------|----------------------|
| ENGL 160 Composition/Rhetoric (3) | RST 112 (3)               | PHIL 113 (3)         |
| ENGL 180 World Literature (3)     | RST Elective (3)          | PHIL Elective (3)    |
| ENGL Elective (3)                 | Modern Language I (3)     | Global History (3)   |
| Fine Arts Elective (3)            | Modern Language II (3) or | History Elective (3) |
| Social Science Elective (3)       | Elective (3)              |                      |

**B. REQUIRED MAJOR COURSES (36 Credits)**

**C. ELECTIVE MAJOR COURSES (choose 12 Credits)**

|   |   |
|---|---|
| CS 142 Programming in C++ (3) (F)               | ELECTIVE A – choose 6 Credits                       |
| *MATH 155 or 220 Statistics (3) (F/S) (SI, SII) | CS 314 Mathematical Modeling (3) (A)                |
| MATH 211 Calculus I (4) (S)                     | MATH 323 Theory of Numbers (3) (F-Odd)              |
| MATH 212 Calculus II (4) (F)                    | MATH 324 College Geometry (3) (F-Even)              |
| MATH 213 Calculus III (4) (S)                   | MATH 456 Mathematical Statistics (3) (A)            |
| MATH 219 History of Mathematics (3) (F-Odd)     |   |
| MATH 321 Abstract Algebra (3) (S-Odd)           | ELECTIVE B – choose 6 Credits                       |
| MATH 322 + L Linear Algebra (3) (S)             | MATH 311 Differential Equations (3) (A) (F)         |
| MATH 495 Senior Seminar (1) (F)                 | MATH 420 Discrete Mathematics (3) (F-Even)          |
| PHYS 303 + L General Physics I (4) (F)          | MATH 425 Topology (3) (A)                           |
| PHYS 304 + L General Physics II (4) (S)         | MATH 430 Real Analysis (3) (A) (F/S)                |
|   | MATH 440 Complex Variables (3) (A)                  |
|   |   |
|   | <b>D. SUGGESTED ELECTIVES (choose 33 Credits)</b>   |
|   | ASTR 250 The Solar System (3) (S)                   |
|   | ASTR 260 Galaxies, Relativity and Cosmology (3) (S) |
|   | PHYS 112 Intro to Astronomy (3) (F)                 |
|   | CS 111 Problem Solving and the Computer (3) (F)     |
|   | CS 241 Machine Language with Assembler              |
|   | CS 314 Math Models and Computer Techniques          |
|   | CS 320 Software Engineering (3) (S)                 |
|   | CS 350 Computer Graphics (3) (S)                    |
|   | CS 456 Intro to Programming Languages               |
|   | CS 463 Intro to Numerical Methods                   |
|   | CS 483 Intro to Theory of Computation               |
|   | CS 498 Special Topics in Computer Science           |

Math Placement Test: all students must take this test unless they have AP or dual enrollment credits which meet **all** required courses for the major.

< 40: must take MATH 095 before any other math course (credits do not count towards graduation)

≥40: eligible for MATH 155, MATH 160 (pre-requisite course for MATH 211)

≥75: eligible for all math courses including MATH 211 (Calculus I)

\*you may need to take MATH 095 prior to taking MATH 155 requirement depending on Math Placement Test

\*\* you may need to take MATH 095, MATH 160 prior to MATH 170 requirement depending on Math Placement Test

One or two semesters of required Modern Language depends on Foreign Language Placement Exam.

F: fall semester; S: spring semester; SI: summer I semester; SII; summer II semester; F/S: fall or spring semester