I. **Required Mathematics Courses** (17 credits)

A. **Calculus:**

**PATH 1:**
- MATH 1205 Calculus 3 ( )
- MATH 1206 Calculus 3 ( )
- MATH 1223 Vector Geometry 2 ( )

**PATH 2:**
- MATH 1225 Calculus of a Single Variable I 4 ( )
- MATH 1226 Calculus of a Single Variable II 4 ( )

B. **Multivariable Calculus:** One of the following:

**PATH 1:**
- MATH 2224 Multivariable Calculus 3 ( )

**PATH 2:**
- MATH 2204 Intro to Multivariable Calculus 3 ( )

Note: CMDA 2005 Integrated Quantitative Sciences may be substituted for either MATH 2204 or 2224

C. **Linear Algebra:**
- MATH 2114 Intro to Linear Algebra 3 ( )

D. **ODE's:**
- MATH 2214 Intro. to Differential Equations 3 ( )

Note: CMDA 2006 Integrated Quantitative Sciences may be substituted for MATH 2214.

II. **Math Electives** (9 credits)

Any 9 hours of MATH courses numbered 3000 or higher with the following exceptions.

- MATH 2534 Intro to Discrete Mathematics (3) may be used.
- The following may **not** be used:
  - MATH 3054 Programming For Mathematical Problem Solving (3)
  - MATH 4044 History Of Mathematics (3)
  - MATH 4625, 4626 Mathematics For Secondary Teachers (3)
  - MATH 4644 Secondary School Mathematics With Technology (3)
  - MATH 4654 Capstone Thesis And Seminar (3)
  - MATH 4664 Senior Math Education Seminar (3)
  - MATH 4974 Independent Study (3)
  - MATH 4994 Undergraduate Research (3)
- MATH 4984 Special Study may be used **only** if permission is granted by the associate head for undergraduate students.
- CMDA 3605, 3606 Mathematical Modeling: Methods and Tools and CMDA 4604 Intermediate Topics in Mathematical Modeling may be used.

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**Note:** Enrollment opportunities in some of these courses may be limited for nonmajors.

III. **Total Hours.** 25 semester credits required.

IV. **Minimum GPA.** The courses used to satisfy the minor requirements must be completed with a combined GPA of 2.0 or higher.

**Note:** Unless specified, course duplications or non-mathematics substitutions are not acceptable in lieu of the specific courses indicated above.