

### What will I be studying?

The undergraduate mathematics program offers a diversity of courses designed not only to enable the student to pursue a profession in mathematics itself, but also to enhance the student's competence in the fields of engineering, the physical sciences, the life sciences, and the social sciences. The program emphasizes the broad nature of modern mathematics and its close associations with the real world and prepares students for careers in industry or secondary education, as well as entry into graduate school.

### Career Ideas!

**Mathematicians can work in any industry or any government agency in a variety of roles:**

**Actuary**

**Operations and Research Analyst**

**Engineering**

**Secondary Math Education**

**Mathematician**

**Computer Programmer**

**Physicist & Astronomer**

**Meteorology**

**Accountancy, Finance or Banking**



**Science Center (SCA) 239**



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[math.usf.edu](http://math.usf.edu)

### Contact Us

**USF Math Club**

**Nagle Lectures**

**American Mathematical Society**

**Mathematical Association of America**

**Society of Actuaries**

### Get Involved!

Mathematics and Statistics Department  
Mathematics – Applied Concentration, B.A.

# Example Four Year Plan

## Year 1

| Fall  | Spring  | Summer                                |
|---|---|---------------------------------------|
| Supporting Science and Lab (CHM, BSC, GLY, PHY) | Supporting Science and Lab (CHM, BSC, GLY, PHY) | Non-Major Elective                    |
| MAC 2311: Calculus I**                          | MAC 2312: Calculus II                           | Enhanced Gen-Ed: Info & Data Literacy |
| ENC 1101: Composition 1                         | ENC 1102: Composition 2                         |                                       |
| Core Humanities                                 | Enhanced Gen-Ed: Creative Thinking              |                                       |
|   |   |                                       |
| Total Hours: 14                                 | Total Hours: 14                                 | Total Hours: 6                        |

## Year 2

| Fall                                      | Spring                            | Summer                         |
|---|-----------------------------------|--------------------------------|
| MAC 2313: Calculus III                    | Foreign Language Level 2          | Upper-Level Non-Major Elective |
| Foreign Language Level 1                  | MGF 3301: Bridge to Abstract Math | Upper-Level Non-Major Elective |
| Enhanced Gen-Ed: Human/Cultural Diversity | MAP 2302: Differential Equations  |                                |
| Core Social Science Course                | Non-Major Elective                |                                |
|   |                                   |                                |
| Total Hours: 14                           | Total Hours: 13                   | Total Hours: 6                 |

## Year 3

| Fall                      | Spring   | Summer         |
|---------------------------|--|----------------|
| MAS 3105: Linear Algebra  | COP 4313: Symbolic Computation                           |                |
| MAS 3156: Vector Calculus | MAS 4301: Elementary Abstract Algebra                    |                |
| Non-Major Elective        | MAP 4341: Introduction to Partial Differential Equations |                |
| Non-Major Elective        | Enhanced Gen-Ed: High Impact Practice                    |                |
| Non-Major Elective        | Non-Major Elective                                       |                |
|                           |  |                |
| Total Hours: 15           | Total Hours: 15  | Total Hours: 0 |

## Year 4

| Fall  | Spring                                    | Total Credits to Graduation                               |
|---|---|---|
| Major: Numerical/Algorithms Requirement               | Major: Statistics/Probability Requirement | <b>Major Requirements:</b><br>53 credit hours             |
| Major: Upper-Level Elective Requirement               | Major: Discrete Requirement               |   |
| Enhanced Gen-Ed: Ethical Reasoning & Civic Engagement | Upper-Level Non-Major Elective            | <b>General Education Requirements:</b><br>27 credit hours |
| Upper-Level Non-Major Elective                        | Non-Major Elective                        |   |
|   |   | <b>Other Degree Requirements:</b><br>41 credit hours      |
|   |   |   |
| Total Hours: 12                                       | Total Hours: 12                           | Total= 120-121  |

\*\*May require completion of additional math pre-requisites (consider the [MPT](#) or [CPT](#) exams)