



## Springfield College Sequencing Guide Mathematics Major (non-teaching) (MATH) ▼ 2019-2020

If you entered Springfield College in 2019-2020, use this guide for sequencing your courses. Requirements are subject to change and may not be offered when listed. Use your online degree audit to verify your progress, and always confirm your plans with your advisor.

### GenEd Requirements, Electives, and College Requirements

In addition to the major requirements listed below, you will need to fill the following General Education (GenEd) categories:

- |                              |                         |                               |                     |
|------------------------------|-------------------------|-------------------------------|---------------------|
| • Wellness - HLTH 100        | • Spiritual and Ethical | • Behavioral/Social Sciences  | • Social Justice    |
| • Literary Studies           | • Natural Sciences      | • International/Multicultural | • Physical Activity |
| • Visual and Performing Arts | • Historical/Cultural   |                               |                     |

This major typically requires 45 credits to complete. In addition to the GenEd and major requirements listed, you must complete:

- **35 elective credits or more** (depending on GenEds selected) to total at least 120 credits
- The **residency requirement**—45 credits taken at Springfield College (including 15 of your last 30)

### MATH Major Requirements – Typical First-Year Schedule

**Fall:**

ENGL 113, College Writing I (GenEd requirement – 3 cr)  
 MATH 140, Calculus I (3 cr – also fills Quantitative Reasoning GenEd – may first need to take MATH 115, College Algebra, or MATH 125, Precalculus)  
 CISC 105, Introduction to Computer Concepts (3 cr – also fills Computer Applications GenEd)  
 Plus other GenEds, major requirements with flexible timing, or electives (as applicable) to total approximately 15 credits

**Spring:**

ENGL 114, College Writing II (GenEd requirement – 3 cr)  
 MATH 142, Calculus II (3 cr)  
 Plus other GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

### MATH Major Requirements – Typical Second-Year Schedule

**Fall:**

MATH 220, Calculus III (3 cr)  
 Plus GenEds, major requirements with flexible timing, or electives (as applicable) to total approximately 15 credits

**Spring:**

MATH 305, Elementary Differential Equations (3 cr)  
 Plus GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

**Fall or Spring:**

MATH 235, Discrete Mathematics I (3 cr)

### MATH Major Requirements – Typical Third-Year Schedule

**Fall:**

MATH 310, Linear Algebra (3 cr)  
 Plus GenEds, major requirements with flexible timing, or electives (as applicable) to total approximately 15 credits

**Spring:**

MATH 415, Abstract Algebra (3 cr – also fills half of WAC GenEd)  
 Plus GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

**Fall or Spring:**

MATH 335, Discrete Mathematics II (3 cr)  
 MATH 382, Mathematics Seminar (3 cr)  
 MATH 405, Mathematical Analysis (3 cr – also fills half of WAC GenEd)

### MATH Major Requirements – Typical Fourth-Year Schedule

**Fall or Spring:**

Any outstanding GenEds, major requirements, or electives (as applicable) to total a minimum of 120 credits for your career

Requirements continued on next page

### **Additional MATH Major Requirements – Flexible Timing**

MATH 201, Contemporary Applications of Mathematics (3 cr)  
MATH 205, Geometry (3 cr)  
MATH 215, Probability and Statistics (3 cr)  
CISC 165, Visual Programming Concepts (3 cr)  
    **or** CISC 175, Introduction to Computer Science with C++ (3 cr)

### **MATH Major – Program Standards**

Program standards for the MATH major include, but are not limited to:

- Achieve a minimum cumulative GPA of 2.500
- Achieve a minimum cumulative GPA of 2.500 in MATH major requirements
- Complete all program requirements with a grade of C- or better

For more information about these and other program standards, contact your advisor or the MPCS department chairperson.