Springfield College
Sequencing Guide
Mathematics and Computer Technology Major (non-teaching) ▼ 2018-2019

If you entered Springfield College in 2018-2019, 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
- Literary Studies
- Spiritual and Ethical
- Natural Sciences
- Historical/Cultural
- Behavioral/Social Sciences
- International/Multicultural
- Social Justice
- Physical Activity
- For Computer Science conc. - 2nd Writing Across Curriculum Course

This major typically requires 54 credits to complete. In addition to the GenEd and major requirements listed, you must complete:

- **29 elective credits or more** (depending on GenEds selected) to total at least 120 credits
- The **residency requirement**—60 credits taken at Springfield College (including 15 of your last 30)

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 need to first take MATH 115 and/or 125 to prepare)
Plus other GenEds, major requirements with flexible timing, or electives (as applicable) to total 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 15 credits

Fall or Spring:
CISC 103, Studio in Computer Graphics (3 cr – also fills Visual/Performing Arts GenEd)
CISC 105, Introduction to Computer Concepts (3 cr – also fills Computing/Technology GenEd)
CISC 115, Microcomputer Applications (3 cr)

Major Requirements – Typical Second-Year Schedule

Fall or Spring:
MATH 201, Contemporary Applications of Mathematics (3 cr)
MATH 235, Discrete Mathematics I (3 cr)
Plus GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

Major Requirements – Typical Third-Year Schedule

Fall or Spring:
There are no major requirements specifically recommended for your third year. You should select GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

Major Requirements – Typical Fourth-Year Schedule

Fall or Spring:
There are no major requirements specifically recommended for your fourth year. You should select any outstanding major requirements, GenEds, or electives to total a minimum of 120 credits for your career

Requirements continued on next page

Additional Major Requirements – Flexible Timing

In general, 100-level courses should be taken first or second year, 200-level courses can be taken first year or later, and 300-level can be taken second year or later. As courses may not be offered every year, 400-level courses should be taken third year if offered. Check course descriptions for specific prerequisites.

CISC 202, Computer Animation (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)

In addition, you must complete one of the following concentrations:

Computer Science:

CISC 175, Introduction to Computer Science with C++ (3 cr)
CISC 235, Computer Logic Design (3 cr)
CISC 255, Data Communications and Distributed Processing (3 cr)
CISC 482, Computer Systems Seminar (3 cr – also fills one WAC requirement)

*In addition, select **3** of the following courses, for **9 credits**:*
CISC 210, Fundamentals of Operating Systems (3 cr)
CISC 275, Data Structures Using C++ (3 cr)
CISC 280, Object-Oriented Programming with Java (3 cr)
CISC 315, Database Development and Management (3 cr)
CISC 375, Computer Architecture (3 cr)

Mathematics:

MATH 220, Calculus III (3 cr)
MATH 305, Elementary Differential Equations (3 cr)
MATH 310, Linear Algebra (3 cr)
MATH 335, Discrete Mathematics II (3 cr)
MATH 382, Mathematics Seminar (3 cr)
MATH 405, Mathematical Analysis (3 cr – also fills one WAC requirement)
MATH 415, Abstract Algebra (3 cr – also fills one WAC requirement)

MACT Major – Program Standards

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

- A minimum cumulative GPA of 2.500
- Achieve a minimum of 2.500 GPA in all program 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 chairperson.

Academic Advising Center
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