



Springfield College Sequencing Guide Computer and Information Sciences Major ▼ 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
- Visual and Performing Arts
- Spiritual and Ethical
- Natural Sciences
- Historical/Cultural
- Behavioral/Social Sciences
- International/Multicultural
- Social Justice
- Physical Activity

This major typically requires 42 to 45 credits to complete. In addition to the GenEd and major requirements listed, you must complete:

- **32 to 48 elective credits or more** (depending on GenEds selected) to total at least 120 credits
- A **minimum cumulative GPA** of 2.000 or higher
- 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)
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)
CISC 175, Introduction to Computer Science with C++ (3 cr – also fills Computer Technology GenEd)
Plus other GenEds, major requirements with flexible timing, or electives (as applicable) to total 30 credits for the year

Fall or Spring:

CISC 115, Microcomputer Applications (3 cr)
CISC 120, Introduction to Programming Using Mobile Technology (3 cr – strongly recommended as an elective)
MATH course(s) appropriate for your intended concentration

Major Requirements – Typical Second-Year Schedule

Fall or Spring:

CISC 275, Data Structures Using C++ (3 cr)
CISC 315, Database Development and Management (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:

CISC 482, Computer Systems Seminar (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

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, 300- and 400-level courses should be taken third year if offered. Check course descriptions for specific prerequisites.

Required for all CISC majors:

ENGL 305, Writing for the Professions (3 cr – also fills half of WAC GenEd, take 2nd, 3rd or 4th year)

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

Systems Management:

BUSM 150, Introduction to Business (3 cr)
BUSM 215, Principles of Management (3 cr)
BUSM 221, Principles of Marketing (3 cr)
BUSM 250, Business Communications (3 cr)
CISC 165, Visual Programming Concepts (3 cr)
CISC 316, Advanced Database Development and Management (3 cr)
CISC 320, Systems Analysis and Software Design (3 cr)
MATH 215, Probability and Statistics (3 cr – also fills Quantitative Reasoning GenEd)

Software Development:

CISC 165, Visual Programming Concepts (3 cr)
CISC 210, Fundamentals of Operating Systems (3 cr)
CISC 280, Object-Oriented Programming with JAVA (3 cr)
CISC 375, Computer Architecture (3 cr)
CISC 420, Software Engineering for Game Programming (3 cr)
MATH 125, Precalculus Mathematics (3 cr – also fills Quantitative Reasoning GenEd))
MATH 310, Linear Algebra (3 cr)

Internet and Network Security:

CISC 375, Computer Architecture (3 cr)
CISC 410, Fundamentals of Operating Systems (3 cr)

In addition, complete the following courses at Springfield Technical Community College (through CCGS—Cooperating Colleges of Greater Springfield):

CIT 160, Networks I (3 cr)
CIT 161, Networks 2 (3 cr)
CIT 162, Networks 3: Advanced Networks Topics (3 cr)
CIT 250, Internet/Network Security I (3 cr)
CIT 251, Internet/Network Security 2 (3 cr)
CIT 252, Advanced Security Topics (3 cr)

In addition, complete the appropriate MATH course(s) to prepare for MATH 235 (and to fill the Quantitative Reasoning GenEd).

CISC Major – Program Standards

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

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