



# Springfield College Sequencing Guide

## Computer and Information Sciences Major (CISC) ▼ 2022-2023

If you entered Springfield College in 2022-2023, 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.

### Core Curriculum Requirements, Electives, and College Requirements

In addition to the major requirements listed below, you will need to fill the following Core Curriculum categories:

- |  |                                 |                                |                              |
|--|---------------------------------|--------------------------------|------------------------------|
| • 100-level Wellness & Physical (1 cr) | • Literature (3 cr)             | • Spiritual and Ethical (3 cr) | • Themed Explorations (9 cr) |
| • 200-level Wellness & Physical (1 cr) | • Quantitative Reasoning (3 cr) | • Aesthetic Expression (3 cr)  | ➢ 3 different prefixes       |
| • 300-level Wellness & Physical (1 cr) | • Scientific Reasoning (4 cr)   | • Historical and Social (3 cr) | ➢ 1 Global course            |

This major typically requires 48-51 credits to complete. In addition to the Core Curriculum and major requirements listed, you must complete:

- **29-32 elective credits or more** to total at least 120 credits
- A **minimum cumulative GPA** of 2.000 or higher
- The **residency requirement**—45 credits taken at Springfield College (including 15 of your last 30)

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

**Fall:**

SCSM 101, Springfield College Seminar (Core requirement – 3 cr)  
ENGL 113, College Writing I (Core requirement – 3 cr)  
Plus other Core and major requirements, or electives to total approximately 15 credits

**Spring:**

ENGL 114, College Writing II (Core requirement – 3 cr)  
Plus other Core and major requirements or electives to total 30 credits for the year

**Fall or Spring:**

CISC 115, Microcomputer Applications (3 cr)

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

**Fall or Spring:**

CISC 175, Introduction to Computer Sciences with C++ (3 cr)  
CISC 275, Data Structures Using C++ (3 cr)  
CISC 315, Database Development and Management (3 cr)  
MATH 235, Discrete Mathematics I (3 cr)  
Plus Core and major requirements, or electives to total 30 credits for the year

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

**Fall or Spring:**

CISC 482, Computer Systems Seminar (3 cr)  
Plus Core and major requirements, or electives to total 30 credits for the year

### CISC 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, Core, or electives to total a minimum of 120 credits for your career

*Requirements continued on next page*

### Additional CISC Major Requirements – Flexible Timing

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

You must complete **one** of the following:

Select 9 courses (27 credits) from the following:

ARTS 231, 3-D Animation (3 cr)  
ARTS 233, 3-D Video Game Design (3 cr)  
ARTS 320, Advanced Web Design (3 cr)  
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 120, Introduction to Programming Using Mobile Technology (3 cr – strongly recommended as an elective)  
CISC 125, Data Analysis Using R (3 cr)  
CISC 165, Visual Programming Concepts (3 cr – spring only course)  
CISC 210, Fundamentals of Operating Systems (3 cr)  
CISC 215, Python Programming (3 cr)  
CISC 280, Object-Oriented Programming with Java (3 cr)  
CISC 316, Advanced Database Development and Management (3 cr)  
CISC 320, Systems Analysis and Software Design (3 cr)  
CISC 375, Computer Architecture (3 cr)  
CISC 420, Software Engineering for Game Programming (3 cr)  
CISC 486, Field Experience in Computer Information Systems-Management (3 cr)  
MATH 125, Precalculus Mathematics (3 cr – also fills Quantitative Reasoning Core Curriculum)  
MATH 215, Probability and Statistics (3 cr)  
MATH 310, Linear Algebra (3 cr)

#### Internet and Network Security Concentration:

CISC 120, Introduction to Programming Using Mobile Technology (3 cr – strongly recommended as an elective)  
CISC 210, Fundamentals of Operating Systems (3 cr)  
CISC 375, Computer Architecture (3 cr)

Complete the following courses at Springfield Technical Community College (through CUGS—Cooperating Colleges of Greater Springfield):

CIT 160, Networks 1 (3 cr)  
CIT 161, Networks 2 (3 cr)  
CIT 162, Networks 3: Advanced Networks Topics (3 cr)  
CIT 250, Internet/Network Security 1 (3 cr)  
CIT 251, Internet/Network Security 2 (3 cr)  
CIT 252, Advanced Security Topics (3 cr)

### 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