

Southern Illinois University Edwardsville
BACHELOR OF SCIENCE - COMPUTER SCIENCE

This guide provides only a suggested course of study and should be used in consultation with an advisor and the SIUE Undergraduate Catalog, available online at www.siu.edu/registrar.

YEAR	FALL	SPRING
1	CS 111 Concepts of Computer Science 3 CS 140 Introduction to Computing I 4 IME 106 Engin. Problem Solving^ 3 MATH 150 Calculus I (Intro NSM) 5 ENG 101 English Composition I 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 18	CS 150 Introduction to Computing II 3 MATH 152 Calculus II (Dist NSM) 5 MATH 224 Discrete Mathematics 3 ENG 102 English Composition II 3 SPC 103 Interpersonal Comm Skills (IGR)* 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 17
2	CS 240 Intro To Computing III 3 CS 275 Interaction Programming 3 ➤Laboratory Science (Intro NSM) 5 Intro Fine Arts & Humanities 3 Intro Social Sciences 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 17	CS 312 Intro to Comp Org & Arch 3 ECE 282 Digital Systems Design 4 ➤Laboratory Science 5 Intro Fine Arts & Hum or Social Sciences 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 15
3	CS 321 Human-Comp Interact Design 3 CS 340 Algorithms & Data Structures 3 MATH ELECTIVE** 3 ➤Laboratory Science 4-5 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 13-14	CS 314 Operating Systems 3 CS 325 Software Engineering 3 CS ELECTIVE I# 3 STAT 380 Statistics 3 Dist Social Sciences 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 15
4	CS 330 Computing Languages 3 CS 425 Software Project Development 3 CS ELECTIVE II# 3 CS ELECTIVE III# 3 Interdisciplinary Studies (IS) 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 15	CS 499 Senior Project 3 CS ELECTIVE IV# 3 CS ELECTIVE V# 3 Dist Fine Arts & Humanities 3 International Issues/Cultures## 3 <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> 15

- ^ IME 106 is for incoming freshmen & transfer students with less than 16 hours. Other students should take PHIL, MATH, or FL 106.
- * If SPC105 is taken instead of SPC 103, then a course from the list of Intergroup Relations in the current SIUE catalog must also be taken.
- ** MATH 250, 321, or 423 can be used to satisfy this requirement.
- See Laboratory Science Requirements on the back of this sheet.
- # CS 382, 423, 434, 438, 447, 454, 456, 482, 490, 495(with advanced approval), ECE 381, 482, 483, and MATH 465 can be used as CS electives.
- ## Courses that fulfill this requirement may satisfy another General Education requirement. Refer to the SIUE Undergraduate Catalog for a list of approved courses.

For additional information, contact the Computer Science Department, EB 2054, 650-2386, or Engineering Student Services, EB 2012, 650-5300.

COMPUTER SCIENCE (B.S.) ELECTIVES

Some of the elective courses are offered every year, while others are offered on the basis of student demand and faculty availability.

FALL

CS 423 Compiler Construction
CS 434 Database Mgmt Systems
CS 447 Networks & Data Communications
CS 482 Computer Graphics
CS 490 Topics in CS

SPRING

CS 434 Database Mgmt Systems
CS 438 Artificial Intelligence
CS 447 Networks & Data Communications
CS 456 Algorithms & Complexity
CS 490 Topics in CS

SUMMER

CS 490 Topics in CS

All core courses are offered fall and spring and on an alternating schedule between daytime and evening. Courses with multiple sections in a given semester will normally have at least one evening section.

➤ **Laboratory Science Requirements**

PHYS 151 and PHYS 151L

PHYS 152 and PHYS 152L

OR

CHEM 121a and CHEM 125a+

CHEM 121b and CHEM 125b

Plus one additional laboratory course from:

BIOL 150*

PHYS 151 and 151L

CHEM 121a and 125a+

PHYS 201 and PHYS 201L

+ CHEM 131 and departmental approval.

135 maybe substituted with

* BIOL 150 has a prerequisite of CHEM 121a/125a.

Declaring a Computer Science Major: To declare a major in Computer Science, it is necessary to have:

1. Completed Academic Development courses required by the University;
2. Completed required courses to address high school deficiencies;
3. Eligibility to enroll in MATH 125, Pre-Calculus Math with Trigonometry;
4. A cumulative GPA of at least 2.0 (on a 4.0 scale).