

**COMPUTER SCIENCE
BACHELOR OF SCIENCE DEGREE
121-122 Semester Hours**

FALL		SPRING	
CS 111 – Concepts of Computer Science (BICS)	3	CS 150 – Introduction to Computing II	3
CS 140 – Introduction to Computing I	3	ENG 102 – English Composition II ³	3
ENG 101 – English Composition I ¹	3	RA 101 – Reasoning & Argumentation ⁴	3
MATH 150 – Calculus I (BPS)	5	MATH 152 – Calculus II (FQR)	5
ACS 103 – Interpersonal Communication Skills	3	MATH 223 OR 224 Discrete Mathematics (BPS)	3
*FST 101 – Succeeding & Engaging at SIUE	1		
TOTAL	18	TOTAL	17

FALL		SPRING	
CS 234 – Database and Web System Dev.	3	CS 286 – Intro to Comp Organization & Architecture	3
MATH Elective ^b	3	Math Elective ^b	3
Laboratory Science Sequence I (BPS, EL)	4	Laboratory Science Sequence II (BPS, EL) ^a	5
Breadth Fine & Performing Arts (BFPA)	3	STAT 244 or STAT 380 – Statistics for Applications	3-4
Breadth Humanities (BHUM)	3		
TOTAL	16	TOTAL	14/15

FALL		SPRING	
CS 360 – Ethical and Social Implications of C.	3	CS 325 – Software Engineering	3
CS 340 – Algorithms and Data Structures	3	CS 447 – Networks and Data Communications	3
CS 314 – Operating Systems	3	CS 330 Programming Languages	3
Lab Science Elective ^d	5	Breadth Life Science (BLS)	3
		Interdisciplinary Studies (IS) (EGC) (EUSC) ⁶	3
TOTAL	14	TOTAL	15

FALL		SPRING	
CS 425 – Senior Project Software Design	3	CS 499 – Senior Project Software Implementation	3
CS Elective I ^c	3	CS Elective IV ^c	3
CS Elective II ^c	3	CS Elective V ^c	3
CS Elective III ^c	3	Life, Physical or Social Science/Health Experience (EH) ⁷	3
Social Science (BSS)/Global Cultures (EGC)	3		3
TOTAL	15	TOTAL	15

Declaration of Major: Students interested in any of the majors offered by the School of Engineering should seek advisement from the School of Engineering when they initially enroll in the University and should declare a major as soon as possible. Students admitted to programs offered by the School of Engineering shall have met University admission requirements, successfully completed any required academic development and high school deficiency courses, eligibility to enroll in MATH 125 – Pre-Calculus, and have a cumulative GPA of 2.0 or better in any completed University course work.

SEE REVERSE SIDE FOR ADDITIONAL INFORMATION.

FOR MORE INFORMATION CONTACT THE DEPARTMENT OF COMPUTER SCIENCE AT (618) 650-2386

*FST 101 – for first time freshmen only. Must be taken in the first semester.

¹ ENG 101 must be successfully completed within the First 30 Hours.

² Quantitative Reasoning (QR) 101 must be successfully completed within the First 60 Hours. MATH 150 successfully completed (with a grade of 'C' or better) will fulfill this requirement.

³ ENG 102 must be successfully completed within the First 45 Hours.

⁴ Reasoning & Argumentation (RA 101) must be successfully completed within the First 45 Hours.

⁵ ACS 103 must be successfully completed within the First 30 Hours. ACS 103 can be used as a Foundations course, and will also fulfill the EUSC requirement. If ACS 101 is taken instead of ACS 103, the EUSC requirement will have to be met by another appropriate course.

⁶ Interdisciplinary Studies (IS) Courses must be taken at the junior/senior level class standing. This requirement is not waived with completion of transfer associate degree or IAI-GECC. It is recommended that students choose a course to meet this general education requirement and Global Cultures (EGC). Selecting one of the following: IS 324, 326, 336, 340, 352, 353, 363, 375, 377, 400 or 401 will satisfy both the requirement of an IS course and the GLOBAL CULTURES (GC) requirements. In addition, IS 352 and 375 will fulfill the EGC, EUSC and IS requirements. If a course is not selected that meets two general education requirements, then a course from the list of GC courses must also be taken.

⁷ Students may be able to complete the Health Experience (EH) as an approved project or activity; if so, an additional course is not needed. (See academic advisor for approved project or activity). In addition, *BIOL 203 or *BIOL 205 will fulfill a BLS and EH requirement. *Prerequisite/s required courses.

a LABORATORY SCIENCE SEQUENCE

Laboratory Science Sequence I & II courses can be:

(a) PHYS 141 & PHYS 151L and PHYS 142 and PHYS 152L; (b) PHYS 151 & PHYS 151L and PHYS 152 and PHYS 152L; (c) CHEM 121a & 125a and CHEM 121b and 125b.

b Two Math Electives (MATH 250, 321, or 423). MATH 321 or 423 completes a MATH minor.

c CS ELECTIVES (5 required)

CS Electives include: CS 321, CS 382, CS 423, CS 434, CS 438, CS 454, CS 456, CS 482, CS 490 (may count twice), CS 495 (may count twice), ECE 381, ECE 482, and MATH 465.

d LAB SCIENCE ELECTIVE (WITH LAB)

Lab Science (w/lab) can be one of the following:

BIOL 150, CHEM 121a & 125a, PHYS 141 & 151L, PHYS 151 & 151L, or PHYS 201 & 201L (the same course cannot count for both Natural Science and Laboratory Science Sequence)

Minor Requirements

CS 111 – Concepts of Computer Science CS 150 – Introduction to Computing II

CS 140 – Introduction to Computing I CS 286 – Introduction to Computer Organization & Architecture

Three additional courses from the following list: CS 234, 314, 321, 325, 330, 340, 382, 423, 434, 438, 447, 454, 456, 482, 490, 495. All courses must be completed with a minimum grade of C. At least six semester hours must be earned at SIUE.

University Requirements (Non-General Education)

- Bachelor of Science Degree Requires completion of 8 lecture courses in life (BLS* or LS*), physical (BPS* or PS*) or social science (BSS* or SS*) including 2 with labs (EL*)
- Minimum of 120 semester hours must be completed.
- Minimum GPA of 2.0 must be achieved.

