# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: California State University, Fullerton 2022-2023 General Catalog, Semester

From: Sierra College 2022-2023 General Catalog, Semester

# **Computer Science, B.S.**

#### **COMPUTER SCIENCE**

The degree program for the Bachelor of Science in Computer Science assumes that students have already obtained a working knowledge of personal computing fundamentals and applications, including word processing, spreadsheets, database systems, e-mail systems and presentation graphics.

The curriculum begins with a three-course sequence covering concepts of programming and data structures. If students have knowledge of these topics, but do not have the courses to transfer, nor AP scores to submit, they may take the Computer Science Placement Examination to waive one or more of these courses. The test may be taken only once, and scores are valid for two consecutive semesters.

#### General Education

All students at Cal State Fullerton are expected to complete prescribed units of General Education that are made up of courses outside of their chosen disciplines. Students seeking a degree in Engineering have been provided exceptions from some of the General Education requirements. For this reason, it is important that students take the approved G.E. courses for Engineering majors that are found in their Titan Degree Audit (TDA). Additionally, they should confirm the G.E. courses that are required within their specific programs with their respective advisers.

## **LOWER DIVISION CORE**

Select 15 Semester	Unit(s) from the following
CPSC 120 - Introduction to Programming (3.00)	← No Course Articulated
CPSC 121 - Object-Oriented Programming (3.00)	← CSCI 12 - Programming Concepts and Methodology I (3.00)
CPSC 131 - Data Structures (3.00)	← CSCI 13 - Programming Concepts and Methodology II (3.00)
CPSC 240 - Computer Organization & Assembly Language (3.00)	CSCI 39 - Introduction to Computer Architecture and Assembly Language (3.00)
CPSC 253 - Cybersecurity Foundations and Principles (3.00)	← No Course Articulated
	And
Select 1 Course	e(s) from the following
CPSC 223C - C Programming (3.00)	← No Course Articulated
CPSC 223J - Java Programming (3.00)	← No Course Articulated
CPSC 223N - Visual C# Programming (3.00)	← No Course Articulated
	← No Course Articulated

## **MATHEMATICS REQUIREMENTS**

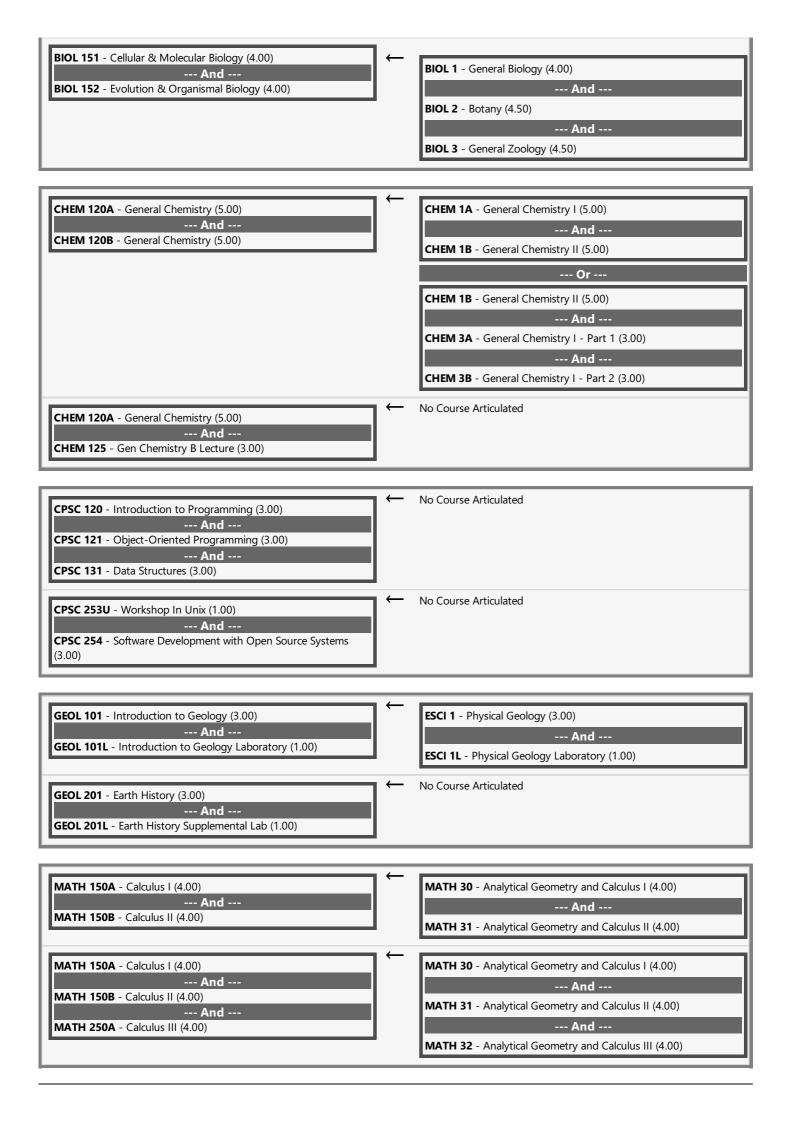
Select 18 Semester Unit(s) from the following				
<b>MATH 150A</b> - Calculus I (4.00)	← MATH 30 - Analytical Geometry and Calculus I (4.00)			
<b>MATH 150B</b> - Calculus II (4.00)	← MATH 31 - Analytical Geometry and Calculus II (4.00)			
MATH 170A - Mathematical Structures I (3.00)	← CSCI 26 - Discrete Structures for Computer Science (3.00)			
MATH 170B - Mathematical Structure II (3.00)	← No Course Articulated			
MATH 338 - Stat Appl to Natural Sci (4.00)	← No Course Articulated			

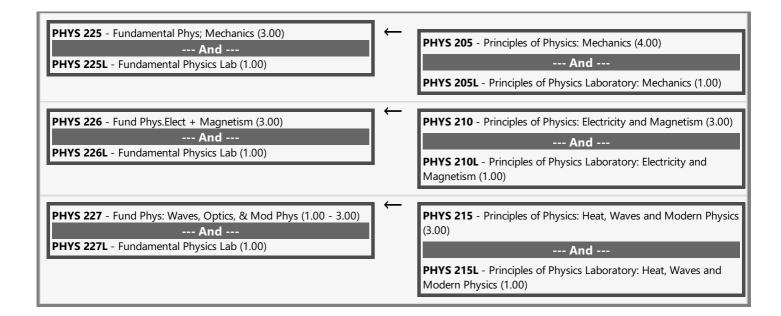
MATH AND SCIENCE (WITH CORRESPONDING LAB) ELECTIVES- SEE ADDITIONAL INFORMATION UNDER ARTICULATION DETAILS

BIOL 101 - Elements of Biology (3.00)	$\leftarrow$	BIOL 10 - Introduction to Biology (3.00)			
BIOL 101L - Elements of Biology Laboratory (1.00)	$\leftarrow$	No Course Articulated			
BIOL 151 - Cellular & Molecular Biology (4.00)	$\leftarrow$	BIOL 1 - General Biology (4.00)			
BIOL 152 - Evolution & Organismal Biology (4.00)	<b>←</b>	No Course Articulated			
CHEM 120A - General Chemistry (5.00)	<b>←</b>	CHEM 1A - General Chemistry I (5.00)			
• • •		Or			
		CHEM 3A - General Chemistry I - Part 1 (3.00)			
		And			
		CHEM 3B - General Chemistry I - Part 2 (3.00)			
CHEM 120B - General Chemistry (5.00)	←	CHEM 1B - General Chemistry II (5.00)			
CHEM 123 - Chemistry for Engineers (3.00)	$\leftarrow$	No Course Articulated			
CHEM 125 - Gen Chemistry B Lecture (3.00)	$\leftarrow$	No Course Articulated			
GEOL 101 - Introduction to Geology (3.00)		ESCI 1 - Physical Geology (3.00)			
GEOL 1011 - Introduction to Geology (3.00)  GEOL 1011 - Introduction to Geology Laboratory (1.00)	<u></u>	ESCI 1L - Physical Geology (3.00)			
GEOL 201 - Earth History (3.00)	<u>`</u>	ESCI TE - Physical deology Eaboratory (1.00)			
GLOE 201 - Latti History (5.00)	`	ESCI 3 - Historical Geology (3.00)			
		And			
		ESCI 3L - Historical Geology Laboratory (1.00)			
GEOL 201L - Earth History Supplemental Lab (1.00)	<b>←</b>	No Course Articulated			
MATH 250A - Calculus III (4.00)	<b>←</b>	MATH 32 - Analytical Geometry and Calculus III (4.00)			
MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00)		No Course Articulated			
PHYS 225 - Fundamental Phys; Mechanics (3.00)	←	No Course Articulated			
PHYS 225L - Fundamental Physics Lab (1.00)	$\leftarrow$	No Course Articulated			
PHYS 226 - Fund Phys.Elect + Magnetism (3.00)	$\leftarrow$	No Course Articulated			
PHYS 226L - Fundamental Physics Lab (1.00)	$\leftarrow$	No Course Articulated			
<b>PHYS 227</b> - Fund Phys: Waves, Optics, & Mod Phys (1.00 - 3.00)	$\leftarrow$	No Course Articulated			
PHYS 227L - Fundamental Physics Lab (1.00)	<b>←</b>	No Course Articulated			
COMPUTER	SCIEN	CE ELECTIVES			
CPSC 254 - Software Development with Open Source Systems (3.00)	<b>←</b>	No Course Articulated			
REQUIRED FOR GRADUATION					
POSC 100 - American Government (3.00)	<b>←</b>	POLS 1 - American Government (3.00)			
ARTICUL	OITA	N DETAILS			

BIOL 101 - Elements of Biology (3.00)

--- And --
BIOL 101L - Elements of Biology Laboratory (1.00)





#### **END OF AGREEMENT**