# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

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

From: Ohlone 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 Semeste	r Unit(s	) from the following		
CPSC 120 - Introduction to Programming (3.00)	<b>←</b>	CS 102 - Introduction to Computer Programming Using C++ (3.00) Or CS 125 - Introduction to Java Programming (4.00)		
CPSC 121 - Object-Oriented Programming (3.00)	$\leftarrow$	No Course Articulated		
CPSC 131 - Data Structures (3.00)	$\leftarrow$	CS 124 - Programming with Data Structures (3.00)		
CPSC 240 - Computer Organization & Assembly Language (3.00)	$\leftarrow$	CS 118 - Introduction to Assembly Language Programming (3.00		
CPSC 253 - Cybersecurity Foundations and Principles (3.00)	<del></del>	No Course Articulated		
	And			
Select 1 Course(s) from the following				
CPSC 223C - C Programming (3.00)	$\leftarrow$	No Course Articulated		
CPSC 223J - Java Programming (3.00)	$\leftarrow$	No Course Articulated		
CPSC 223N - Visual C# Programming (3.00)	$\leftarrow$	No Course Articulated		
CPSC 223P - Python Programming (3.00)	←	No Course Articulated		

#### **MATHEMATICS REQUIREMENTS**

Select 18 Semester Unit(s) from the following				
<b>MATH 150A</b> - Calculus I (4.00)	←	MATH 101A - Calculus with Analytic Geometry (5.00)		
<b>MATH 150B</b> - Calculus II (4.00)	<b>←</b>	MATH 101B - Calculus with Analytic Geometry (5.00)		
MATH 170A - Mathematical Structures I (3.00)	<b>←</b>	MATH 163 - Discrete Mathematics for Computers (3.00)		

MATH 170A - Mathematical Structures I (3.00)	MATH 163 - Discrete Mathematics for Or	
	CS 113 - Discrete Structures (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

ARTICULATION DETAILS				
Select 12 Semester Unit(s) from the following				
BIOL 101 - Elements of Biology (3.00)	<b>←</b>	No Course Articulated		
BIOL 101L - Elements of Biology Laboratory (1.00)	$\leftarrow$	No Course Articulated		
BIOL 151 - Cellular & Molecular Biology (4.00)	$\leftarrow$	<b>BIOL 101A</b> - Principles of Biology - Molecular and Cellular (5.00)		
BIOL 152 - Evolution & Organismal Biology (4.00)	<b>←</b>	<b>BIOL 101B</b> - Principles of Biology - Organisms and Systems (5.00)		
CHEM 120A - General Chemistry (5.00)	<b>←</b>	CHEM 101A - General Chemistry (5.00)		
CHEM 120B - General Chemistry (5.00)	$\leftarrow$	CHEM 101B - General Chemistry (5.00)		
CHEM 123 - Chemistry for Engineers (3.00)	$\leftarrow$	No Course Articulated		
CHEM 125 - Gen Chemistry B Lecture (3.00)	<b>←</b>	No Course Articulated		
<b>GEOL 101</b> - Introduction to Geology (3.00)	<b>←</b>	GEOL 101 - Introduction to Geology (4.00)		
GEOL 101L - Introduction to Geology Laboratory (1.00)	$\leftarrow$	GEOG 101 - Physical Geography (4.00)		
<b>GEOL 201</b> - Earth History (3.00)	←	No Course Articulated		
<b>GEOL 201L</b> - Earth History Supplemental Lab (1.00)	<b>←</b>	No Course Articulated		
MATH 250A - Calculus III (4.00)	<b>←</b>	MATH 101C - Calculus with Analytic Geometry (5.00)		
MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00)	$\leftarrow$	MATH 103 - Introduction to Linear Algebra (3.00)		
		And		
		MATH 104 - Differential Equations (5.00)		
PHYS 225 - Fundamental Phys; Mechanics (3.00)	<b>←</b>	No Course Articulated		

PHYS 225 - Fundamental Phys; Mechanics (3.00)	$\leftarrow$	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)	$\leftarrow$	No Course Articulated

#### **COMPUTER SCIENCE ELECTIVES**

**CPSC 254** - Software Development with Open Source Systems (3.00) ← No Course Articulated

#### **REQUIRED FOR GRADUATION**

POSC 100 - American Government (3.00) ← PS 102 - Introduction to American Politics (3.00)

## **ARTICULATION DETAILS**





