## **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

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

From: Saddleback 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)	$\leftarrow$	CS 1B - Introduction to Computer Science II (3.50)
CPSC 121 - Object-Oriented Programming (3.00)	$\leftarrow$	CS 1C - Introduction to Computer Science III (3.50)
CPSC 131 - Data Structures (3.00)	$\leftarrow$	CS 1D - Data Structures (3.50)
CPSC 240 - Computer Organization & Assembly Language (3.00)	<b>←</b>	CS 3A - Computer Organization and Machine Language (3.50) And CS 3B - Computer Organization and Assembly Language (3.50)
CPSC 253 - Cybersecurity Foundations and Principles (3.00)	<b>←</b>	CIMS 130 - INTRO TO INFORMATION SYSTEMS SECURITY: COMPTIA SECURITY+ (3.00)
	- And	
Select 1 Course	(s) fro	m the following
CPSC 223C - C Programming (3.00)	$\leftarrow$	No Course Articulated
CPSC 223J - Java Programming (3.00)	<b>←</b>	CS 4A - Introduction to JAVA for Computer Science (3.50) Or CIMP 7B - Business Programming - JAVAAdvanced (3.00)
CPSC 223N - Visual C# Programming (3.00)	$\leftarrow$	CIMP 115 - Business Programming - C# (3.50)
CPSC 223P - Python Programming (3.00)	$\leftarrow$	CIMP 8A - Programming with Python (3.00)

## **MATHEMATICS REQUIREMENTS**

Select 18 Semester Unit(s) from the following	
<b>MATH 150A</b> - Calculus I (4.00)	← MATH 3A - Analytic Geometry and Calculus (5.00) Or
	MATH 3AH - Honors Analytic Geometry and Calculus (5.00)
<b>MATH 150B</b> - Calculus II (4.00)	← MATH 3B - Analytic Geometry and Calculus (5.00)

MATH 170A - Mathematical Structures I (3.00)	← No Course Articulated

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		
Select 12 Semester Unit(s) from the following		
BIOL 101 - Elements of Biology (3.00)	← No Course Articulated	
BIOL 101L - Elements of Biology Laboratory (1.00)	← No Course Articulated	
BIOL 151 - Cellular & Molecular Biology (4.00)	← BIO 4A - Principles of Cellular Biology (4.00)	
	Or	
	BIO 3A - General Biology I (5.00)	
	BIO 3AH - Honors General Biology I (5.00)	
BIOL 152 - Evolution & Organismal Biology (4.00)	← BIO 4B - Principles of Organismal Biology (4.00)	
	Or	
	BIO 3B - General Biology II (5.00)	
	BIO 3BH - Honors General Biology II (5.00)	
CHEM 120A - General Chemistry (5.00)	← CHEM 1A - General Chemistry (5.00)	
CHEM 120B - General Chemistry (5.00)	← CHEM 1B - General Chemistry (5.00)	
CHEM 123 - Chemistry for Engineers (3.00)	← No Course Articulated	
CHEM 125 - Gen Chemistry B Lecture (3.00)	← No Course Articulated	
GEOL 101 - Introduction to Geology (3.00)	← No Course Articulated	
GEOL 101L - Introduction to Geology Laboratory (1.00)	← No Course Articulated	
<b>GEOL 201</b> - Earth History (3.00)	← GEOL 2 - Historical Geology (4.00)	
<b>GEOL 201L</b> - Earth History Supplemental Lab (1.00)	← No Course Articulated	

MATH 250A - Calculus III (4.00)	←	MATH 3C - Analytic Geometry and Calculus (5.00)
MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00)	$\leftarrow$	MATH 24 - Elementary Differential Equations (4.00)
		And
		MATH 26 - Introduction to Linear Algebra (4.00)

PHYS 225 - Fundamental Phys; Mechanics (3.00)	← No Course Articulated
PHYS 225L - Fundamental Physics Lab (1.00)	← No Course Articulated
PHYS 226 - Fund Phys.Elect + Magnetism (3.00)	← No Course Articulated
PHYS 226L - Fundamental Physics Lab (1.00)	← No Course Articulated
<b>PHYS 227</b> - Fund Phys: Waves, Optics, & Mod Phys (1.00 - 3.00)	← No Course Articulated
PHYS 227L - Fundamental Physics Lab (1.00)	← No Course Articulated

## **COMPUTER SCIENCE ELECTIVES**

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

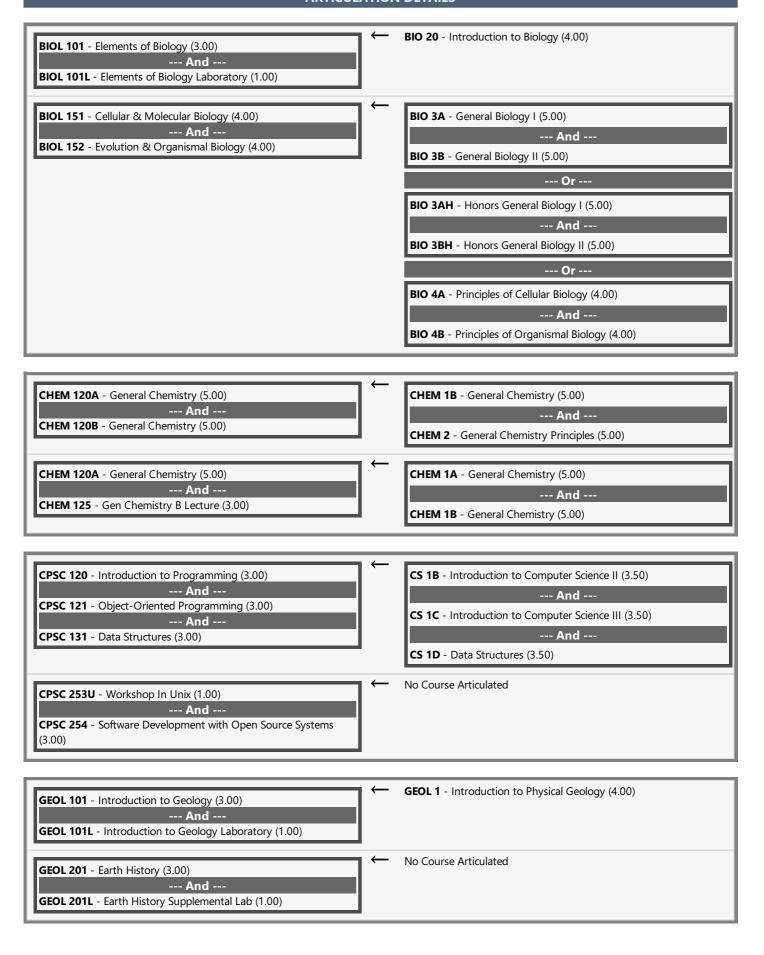
## **REQUIRED FOR GRADUATION**

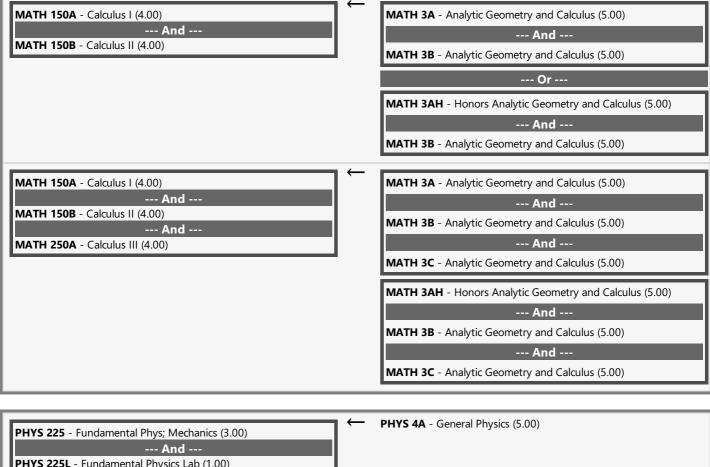
PS 1 - American Government (3.00)

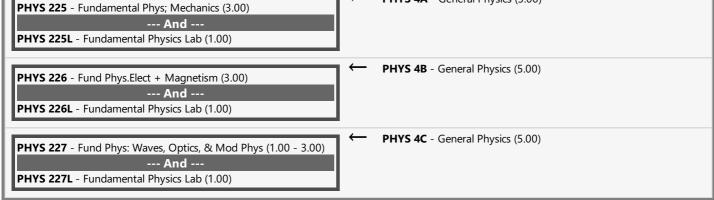
PS 1 - American Government (3.00)

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PS 1H - Honors American Government (3.00)

### **ARTICULATION DETAILS**







### **END OF AGREEMENT**