# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

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

From: Antelope Valley 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**

CPSC 120 - Introduction to Programming (3.00)	$\leftarrow$	CIS 111 - Introduction to Programming and Algorithms (3.00)
CPSC 121 - Object-Oriented Programming (3.00)	<b>←</b>	CIS 111 - Introduction to Programming and Algorithms (3.00)  And CIS 113 - Data Structures (3.00)
CPSC 131 - Data Structures (3.00)	$\leftarrow$	CIS 113 - Data Structures (3.00)
CPSC 240 - Computer Organization & Assembly Language (3.00)	$\leftarrow$	CIS 123 - Assembly Language and Computer Architecture (3.00)
CPSC 253 - Cybersecurity Foundations and Principles (3.00)	$\leftarrow$	No Course Articulated
	- And -	
Select 1 Course	(s) fror	n 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)	$\leftarrow$	No Course Articulated

# **MATHEMATICS REQUIREMENTS**

Select 18 Semester Unit(s) from the following		
MATH 150A - Calculus I (4.00)	← MATH 150 - Calculus and Analytic Geometry (5.00)	
<b>MATH 150B</b> - Calculus II (4.00)	← MATH 160 - Calculus and Analytic Geometry (4.00)	
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	

# **ARTICULATION DETAILS**

Select 12 Semester Unit(s) from the following		
		No Course Articulated
BIOL 101 - Elements of Biology (3.00)		No Course Articulated
<b>BIOL 101L</b> - Elements of Biology Laboratory (1.00)	<b>←</b>	No Course Articulated
BIOL 151 - Cellular & Molecular Biology (4.00)	$\leftarrow$	BIOL 110 - General Molecular Cell Biology (5.00)
BIOL 152 - Evolution & Organismal Biology (4.00)	<b>←</b>	<b>BIOL 120</b> - General Organismal, Ecological and Evolutionary Biology (5.00)
CHEM 120A - General Chemistry (5.00)	<b>←</b>	CHEM 110 - General Chemistry (5.00)

CHEM 120A - General Chemistry (5.00)	$\leftarrow$	CHEM 110 - General Chemistry (5.00)
CHEM 120B - General Chemistry (5.00)	$\leftarrow$	No Course Articulated
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)	←	GEOL 101 - Physical Geology (3.00)
GEOL 101L - Introduction to Geology Laboratory (1.00)	$\leftarrow$	GEOL 101L - Physical Geology Lab (1.00)
<b>GEOL 201</b> - Earth History (3.00)	$\leftarrow$	No Course Articulated
GEOL 201L - Earth History Supplemental Lab (1.00)	$\leftarrow$	No Course Articulated

MATH 250A - Calculus III (4.00)	$\leftarrow$	MATH 250 - Calculus and Analytic Geometry (4.00)
MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00)	$\leftarrow$	MATH 220 - Linear Algebra (4.00)
		And
		MATH 230 - Introduction to Ordinary Differential Equations (4.00)

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

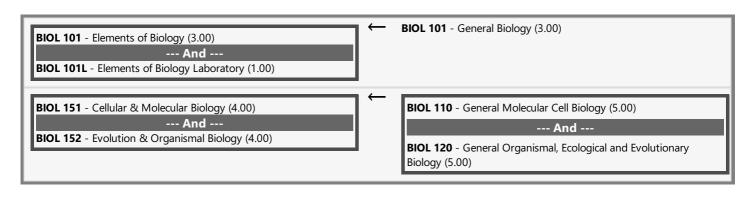
# **COMPUTER SCIENCE ELECTIVES**

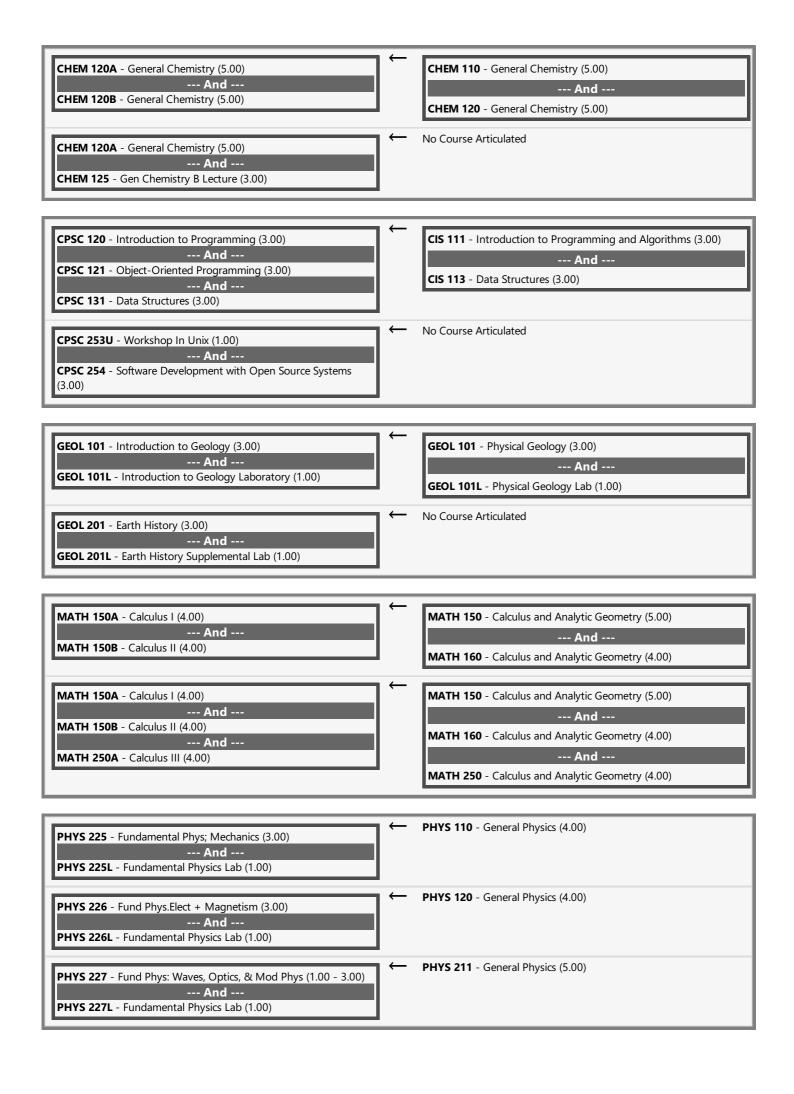
**CPSC 254** - Software Development with Open Source Systems (3.00) ← No Course Articulated

#### **REQUIRED FOR GRADUATION**

POSC 100 - American Government (3.00) ← POLS 101 - American Political Institutions (3.00)

### **ARTICULATION DETAILS**





# **END OF AGREEMENT**