# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: California State University, San Marcos 2022-2023 General Catalog, Semester From: Imperial Valley College 2022-2023 General Catalog, Semester

### **Computer Science - CS Option**

THE ARTICULATION AGREEMENT BELOW IS SUBJECT TO PERIODIC REVISION. PLEASE CONSULT A COUNSELOR EVERY SEMESTER TO OBTAIN CURRENT INFORMATION ABOUT POSSIBLE CHANGES IN THE AGREEMENT.

### MINIMUM GRADE OF C

All courses counted toward the major, including Preparation for the Major courses, must be completed with a letter grade of C (2.0) or better. Credit/No Credit is not accepted.

#### **LOWER AND UPPER DIVISION COURSE OPTIONS**

The course below, MATH 264, can be used to satisfy a major requirement; an upper division course can also be used to satisfy this requirement.

\*Please see the 2022-2023 CSUSM catalog to view the upper division option within the Requirements for Non-Computer Science Supporting Courses section\*

### PREPARATION FOR THE MAJOR

CS 111 - Computer Science I (4.00)	$\leftarrow$	CS 221 - Introduction to Object Oriented Programming in Java (3.00)
CS 211 - Computer Science II (4.00)	$\leftarrow$	CS 231 - Introduction to Data Structures (3.00)
CS 231 - Assembly Language and Digital Circuits (4.00)	$\leftarrow$	CS 281 - Assembly Language and Machine Organization (3.00)

### **NON-COMPUTER SCIENCE SUPPORTING COURSES**

MATH 160 - Calculus with Applications, I (5.00)	$\leftarrow$	MATH 192 - Analytic Geometry and Calculus I (4.00)
MATH 162 - Calculus with Applications, II (4.00)	$\leftarrow$	MATH 194 - Analytic Geometry and Calculus II (4.00)
MATH 270 - Basic Discrete Mathematics (3.00)	$\leftarrow$	MATH 240 - Discrete Mathematics (3.00)
MATH 242 - Introduction to Statistics (3.00)	$\leftarrow$	No Course Articulated
MATH 264 - Introduction to Linear Algebra (3.00)	$\leftarrow$	MATH 230 - Introduction to Linear Algebra with Applications (3.00)

### **Select 8 Unit(s) from the following**

Select 8 Offic(s	) IIOIII	the following
BIOL 104 - Principles of Biology-Human Emphasis (4.00)	←	No Course Articulated
BIOL 160 - Microbiology for Health Sciences (4.00)	$\leftarrow$	BIOL 220 - General Microbiology (5.00)
<b>BIOL 177</b> - Intro to Human Anatomy & Physiology for Kinesiology I (4.00)		BIOL 200 - Human Anatomy and Physiology I (4.00) BIOL 204 - Human Anatomy (4.00)
<b>BIOL 178</b> - Intro to Human Anatomy & Physiology for Kinesiology II (4.00)	$\leftarrow$	BIOL 202 - Human Anatomy and Physiology II (4.00)
		<b>Or BIOL 206</b> - Human Physiology (4.00)
BIOL 210 - Introduction to Cellular and Molecular Biology (4.00)	$\leftarrow$	BIOL 180 - General Biology: Molecules, Cells and Genetics (4.00)
BIOL 211 - Introduction to Organismal and Population Biology (4.00)	$\leftarrow$	<b>BIOL 182</b> - General Biology: Principles of Organismal Biology (4.00)
CHEM 105 - General, Organic, and Biochemistry for Life (4.00)	$\leftarrow$	No Course Articulated
	And	
CHEM 105L - General, Organic, and Biochemistry for Life Laboratory (1.00)	←	No Course Articulated
CHEM 150 - General Chemistry (4.00)		CHEM 200 - General Inorganic Chemistry I (5.00)
	And	

CHEM 150L - General Chemistry Laboratory (1.00)	← CHEM 200 - General Inorganic Chemistry I (5.00)
CHEM 160 - General Chemistry II (3.00)	CHEM 202 - General Inorganic Chemistry II (5.00)
CHEM 175 - General Chemistry Laboratory II (1.00)	And  ← CHEM 202 - General Inorganic Chemistry II (5.00)
CHEM 201 - Organic Chemistry (3.00)	CHEM 204 - Organic Chemistry I (5.00)
CHEM 201L - Organic Chemistry Laboratory (2.00)	And <b>CHEM 204</b> - Organic Chemistry I (5.00)
CHEM 202 - Organic Chemistry (3.00)	← CHEM 206 - Organic Chemistry II (5.00)
	And
CHEM 202L - Organic Chemistry Laboratory (2.00)	← CHEM 206 - Organic Chemistry II (5.00)
PHYS 101 - Introduction to Physics I (4.00)	PHYS 200 - General Physics I (4.00)  And PHYS 202 - General Physics II (4.00)
PHYS 102 - Introduction to Physics II (4.00)	PHYS 200 - General Physics I (4.00)  And PHYS 202 - General Physics II (4.00)
PHYS 201 - Physics of Mechanics and Sound (4.00)	← PHYS 200 - General Physics I (4.00)
PHYS 202 - Physics of Electromagnetism and Optics (4.00)	PHYS 202 - General Physics II (4.00)  And PHYS 204 - General Physics III (4.00)
PHYS 205 - Physics for the Biological Sciences I (4.00)	← No Course Articulated
PHYS 206 - Physics for the Biological Sciences II (4.00)	← No Course Articulated

## **END OF AGREEMENT**