# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

To: University of California, San Diego 2022-2023 General Catalog, Quarter

From: Mount San Antonio College 2022-2023 General Catalog, Semester

## **CSE: Computer Science B.S.**

#### **GENERAL INFORMATION**

DATED MATERIAL, SUBJECT TO CHANGE. PLEASE CONSULT CURRENT UCSD GENERAL CATALOG FOR ANY ADDITIONAL INFORMATION.

Effective Fall 2018, major preparation will be required for this major. For details, visit: <a href="http://admissions.ucsd.edu/MajorPrep">http://admissions.ucsd.edu/MajorPrep</a>

Effective Fall 2015, the B.S. and B.A. in Computer Science, the B.S. in Computer Engineering, and the B.S. in Computer Science with a specialization in Bioinformatics are impacted for transfer students. Visit <u>cse.ucsd.edu</u> for full information.

**General advice:** Transfer students are advised to complete the following courses for their major before enrolling at UC San Diego. Preparing well for the major helps students move efficiently toward graduation.

- Calculus I-for Science and Engineering (Math. 20A)
- Calculus II-for Science and Engineering (Math. 20B)
- Calculus and Analytic Geometry (Math. 20C)
- Linear Algebra (Math. 18)
- Two courses chosen from: PHYS 2A or PHYS 4A, PHYS 2B or PHYS 4B, CHEM 6A or CHEM 6AH, CHEM 6B or CHEM 6BH, BILD 1, BILD 2, BILD 3
- Highest level of introductory computer programming language course offered at the community college. For example, CSE 3, CSE 6R, and 8A may be used to fulfill the lower-division elective requirement; CSE 8B or 11 fulfill other lower-division requirements.

Course equivalency: For course equivalencies not listed below, visit the CSE Student Affairs Office, CSE Building (EBU3B, Room 1200) first floor, or email CSEStudent@eng.ucsd.edu.

For information not found here, please visit the CSE Undergraduate Program at: <a href="https://cse.ucsd.edu/undergraduate">https://cse.ucsd.edu/undergraduate</a>

UC San Diego Advanced Placement (AP) and International Baccalaureate (IB) credit policies are detailed in the links below:

Advanced Placement (AP) <a href="https://www.ucsd.edu/catalog/pdf/APC-chart.pdf">https://www.ucsd.edu/catalog/pdf/APC-chart.pdf</a>

International Baccalaureate (IB) https://catalog.ucsd.edu/files/international-baccalaureate-credits-chart.pdf

### **LOWER DIVISION MAJOR REQUIREMENTS**

CSE 8A - Introduction to Programming and Computational Problem Solving I (4.00)	← CISP 21 - Programming in Java (3.00)				
And					
CSE 8B - Introduction to Programming and Computational Problem Solving II (4.00)	← No Course Articulated				
Or					
<b>CSE 11</b> - Introduction to Programming and Computational Problem Solving - Accelerated Pace (4.00)	← CSCI 145 - JAVA Language and Object Oriented Programming (4.00)				

CSE 12 - Basic Data Structures and Object-Oriented Design (4.00)	<b>←</b>	CSCI 140 - C++ Language and Object Development (4.00) Or
		CSCI 220 - Data Structures I (3.50)
		And
		CSCI 230 - Data Structures II (3.50)
CSE 15L - Software Tools and Techniques Laboratory (2.00)	$\leftarrow$	No Course Articulated
<b>CSE 20</b> - Discrete Mathematics (4.00) Same-As: MATH 15A	$\leftarrow$	CSCI 190 - Discrete Mathematics Applied to Computer Science (4.00)
CSE 21 - Mathematics for Algorithms and Systems (4.00)	$\leftarrow$	No Course Articulated
CSE 30 - Computer Organization and Systems Programming (4.00)	$\leftarrow$	No Course Articulated

MATH 18 - Linear Algebra (4.00)	←	MATH 181 - Calculus and Analytic Geometry (4.00)  And  MATH 285 - Linear Algebra and Differential Equations (5.00)  Or  MATH 260 - Linear Algebra (3.00)
MATH 20A - Calculus for Science and Engineering (4.00)	$\leftarrow$	MATH 180 - Calculus and Analytic Geometry (4.00)
MATH 20B - Calculus for Science and Engineering (4.00)	$\leftarrow$	MATH 181 - Calculus and Analytic Geometry (4.00)
MATH 20C - Calculus and Analytic Geometry for Science and Engineering (4.00)	<b>←</b>	MATH 280 - Calculus and Analytic Geometry (5.00)

Select 2 Course(s) from the following				
<b>BILD 1</b> - The Cell (4.00)	BIOL 2 - Plant and Animal Biology (4.00)			
	And			
	BIOL 4 - Biology for Majors (4.00)			
	Or			
	BIOL 2 - Plant and Animal Biology (4.00)			
	And			
	BIOL 4H - Biology for Majors - Honors (4.00)			
BILD 2 - Multicellular Life (4.00)	←			
The (1.00)	BIOL 2 - Plant and Animal Biology (4.00)			
	And			
	BIOL 4 - Biology for Majors (4.00)			
	Or			
	BIOL 2 - Plant and Animal Biology (4.00)			
	And			
	BIOL 4H - Biology for Majors - Honors (4.00)			
BILD 3 - Organismic and Evolutionary Biology (4.00)	EDICA 2 Plant and Animal Biology (400)			
	BIOL 2 - Plant and Animal Biology (4.00) And			
	BIOL 4 - Biology for Majors (4.00)			
	Or			
	BIOL 2 - Plant and Animal Biology (4.00)			
	And			
	BIOL 4H - Biology for Majors - Honors (4.00)			
CHEM 6A - General Chemistry I (4.00)	CHEM 50 - General Chemistry I (5.00)			
	Or CHEM 50H - General Chemistry I - Honors (5.00)			

CHEM 6B - General Chemistry II (4.00)	CHEM 50 - General Chemistry I (5.00)  And CHEM 51 - General Chemistry II (5.00)  Or CHEM 50H - General Chemistry I - Honors (5.00)  And CHEM 51H - General Chemistry II - Honors (5.00)
PHYS 2A - Physics - Mechanics (4.00)	← PHYS 4A - Engineering Physics (5.00)
PHYS 2B - Physics - Electricity and Magnetism (4.00)	← PHYS 4B - Engineering Physics (5.00)

## **END OF AGREEMENT**