

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: Cabrillo 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: <http://admissions.ucsd.edu/MajorPrep>

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 [cse.ucsd.edu](http://cse.ucsd.edu) 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](mailto:CSEStudent@eng.ucsd.edu).

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

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

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

International Baccalaureate (IB) [https://catalog.ucsd.edu/\\_files/international-baccalaureate-credits-chart.pdf](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)

← **CS 12J** - Introduction to Programming Concepts & Methodology, JAVA (4.00)

--- Or ---

**CS 11** - Introduction to Programming Concepts and Methodology, C++ (4.00)

--- Or ---

**CS 12P** - Python Introductory Programming Concepts and Methodology (4.00)

--- And ---

**CSE 8B** - Introduction to Programming and Computational Problem Solving II (4.00)

← No Course Articulated

--- Or ---

**CSE 11** - Introduction to Programming and Computational Problem Solving - Accelerated Pace (4.00)

← **CS 20J** - Java Programming (4.00)

<b>CSE 12</b> - Basic Data Structures and Object-Oriented Design (4.00)	←	<b>CS 21</b> - Introduction to Data Structures and Algorithms (4.00)
<b>CSE 15L</b> - Software Tools and Techniques Laboratory (2.00)	←	No Course Articulated
<b>CSE 20</b> - Discrete Mathematics (4.00) Same-As: MATH 15A	←	<b>CS 23</b> - Discrete Mathematics (4.00) Same-As: MATH 23 --- Or --- <b>MATH 23</b> - Discrete Mathematics (4.00) Same-As: CS 23
<b>CSE 21</b> - Mathematics for Algorithms and Systems (4.00)	←	No Course Articulated
<b>CSE 30</b> - Computer Organization and Systems Programming (4.00)	←	<b>CS 24</b> - Elementary Computer Organization (4.00)

<b>MATH 18</b> - Linear Algebra (4.00)	←	<b>MATH 6</b> - Introduction to Linear Algebra (3.00)
<b>MATH 20A</b> - Calculus for Science and Engineering (4.00)	←	<b>MATH 5A</b> - Analytic Geometry and Calculus I (5.00)
<b>MATH 20B</b> - Calculus for Science and Engineering (4.00)	←	<b>MATH 5B</b> - Analytic Geometry and Calculus II (5.00)
<b>MATH 20C</b> - Calculus and Analytic Geometry for Science and Engineering (4.00)	←	<b>MATH 5C</b> - Analytic Geometry and Calculus III (5.00)

Select 2 Course(s) from the following		
<b>BILD 1</b> - The Cell (4.00)	←	<b>BIO 9A</b> - Molecular, Cellular, and Animal Biology (5.00) --- And --- <b>BIO 9B</b> - Ecology, Evolution, and Plant Biology (5.00)
<b>BILD 2</b> - Multicellular Life (4.00)	←	<b>BIO 9A</b> - Molecular, Cellular, and Animal Biology (5.00) --- And --- <b>BIO 9B</b> - Ecology, Evolution, and Plant Biology (5.00)
<b>BILD 3</b> - Organismic and Evolutionary Biology (4.00)	←	<b>BIO 9A</b> - Molecular, Cellular, and Animal Biology (5.00) --- And --- <b>BIO 9B</b> - Ecology, Evolution, and Plant Biology (5.00)
<b>CHEM 6A</b> - General Chemistry I (4.00)	←	<b>CHEM 1A</b> - General Chemistry I (5.00)
<b>CHEM 6B</b> - General Chemistry II (4.00)	←	<b>CHEM 1A</b> - General Chemistry I (5.00) --- And --- <b>CHEM 1B</b> - General Chemistry II (5.00)
<b>PHYS 2A</b> - Physics - Mechanics (4.00)	←	<b>PHYS 4A</b> - Physics for Scientists and Engineers I (5.00)
<b>PHYS 2B</b> - Physics - Electricity and Magnetism (4.00)	←	<b>PHYS 4B</b> - Physics for Scientists and Engineers II (5.00)

**END OF AGREEMENT**