

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: Pasadena City 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 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: <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

LOWER DIVISION MAJOR REQUIREMENTS

CSE 8A - Introduction to Programming and Computational Problem Solving I (4.00)



CS 002 - Fundamentals of Computer Science I (4.00)

--- Or ---

CS 003A - Fundamentals of Computer Science II (C++) (4.00)

--- Or ---

CS 003C - Fundamentals of Computer Science (Python) (4.00)

--- And ---

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



CS 003B - Fundamentals of Computer Science (JAVA) (4.00)

--- Or ---

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



CIS 016 - Java Programming (3.00)

--- Or ---

CS 003B - Fundamentals of Computer Science (JAVA) (4.00)

CSE 12 - Basic Data Structures and Object-Oriented Design (4.00)	←	CS 008 - Fundamentals of Computer Science III-Data Structures (4.00)
CSE 15L - Software Tools and Techniques Laboratory (2.00)	←	No Course Articulated
CSE 20 - Discrete Mathematics (4.00) Same-As: MATH 15A	←	MATH 022 - Discrete Mathematics (4.00)
CSE 21 - Mathematics for Algorithms and Systems (4.00)	←	No Course Articulated
CSE 30 - Computer Organization and Systems Programming (4.00)	←	No Course Articulated

MATH 18 - Linear Algebra (4.00)	←	MATH 010 - Linear Algebra and Applications (4.00) --- Or --- MATH 010H - Honors Linear Algebra and Applications (4.00)
MATH 20A - Calculus for Science and Engineering (4.00)	←	MATH 005A - Single Variable Calculus I (5.00) --- Or --- MATH 005AH - Honors Single Variable Calculus I (5.00)
MATH 20B - Calculus for Science and Engineering (4.00)	←	MATH 005B - Single Variable Calculus II (5.00) --- Or --- MATH 005BH - Honors Single Variable Calculus II (5.00)
MATH 20C - Calculus and Analytic Geometry for Science and Engineering (4.00)	←	MATH 005C - Multivariable Calculus (5.00) --- Or --- MATH 005CH - Honors Multivariable Calculus (5.00)

Select 2 Course(s) from the following		
BILD 1 - The Cell (4.00)	←	BIOL 010A - Cellular Biology, Genetics and Evolution (5.00) --- And --- BIOL 010B - The Diversity of Life on Earth: Structure, Function and Ecology (4.00) --- And --- BIOL 010C - Genetics (3.00)
BILD 2 - Multicellular Life (4.00)	←	BIOL 010A - Cellular Biology, Genetics and Evolution (5.00) --- And --- BIOL 010B - The Diversity of Life on Earth: Structure, Function and Ecology (4.00) --- And --- BIOL 010C - Genetics (3.00)
BILD 3 - Organismic and Evolutionary Biology (4.00)	←	BIOL 010A - Cellular Biology, Genetics and Evolution (5.00) --- And --- BIOL 010B - The Diversity of Life on Earth: Structure, Function and Ecology (4.00) --- And --- BIOL 010C - Genetics (3.00)
CHEM 6A - General Chemistry I (4.00)	←	CHEM 001A - General Chemistry and Chemical Analysis I (5.00)
CHEM 6B - General Chemistry II (4.00)	←	CHEM 001A - General Chemistry and Chemical Analysis I (5.00) --- And --- CHEM 001B - General Chemistry and Chemical Analysis II (5.00)
PHYS 2A - Physics - Mechanics (4.00)	←	PHYS 001A - Physics for Scientists and Engineers I: Mechanics (5.00) --- Or --- PHYS 008A - Physics for Scientists and Engineers I: Mechanics (5.00)

PHYS 2B - Physics - Electricity and Magnetism (4.00)



PHYS 001C - General Physics (5.00)

--- **Or** ---

PHYS 008B - Physics for Scientists and Engineers II: Waves, Electricity & Magnetism (5.00)

END OF AGREEMENT