Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, San Diego 2022-2023 General Catalog, Quarter From: MiraCosta 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 <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: 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 111 - Introduction to Computer Science I: Java (3.00)			
	- And			
CSE 8B - Introduction to Programming and Computational Problem Solving II (4.00)	CS 112 - Introduction to Computer Science II: Java (3.00)			
Or				
CSE 11 - Introduction to Programming and Computational Problem Solving - Accelerated Pace (4.00)	← No Course Articulated			

CSE 12 - Basic Data Structures and Object-Oriented Design (4.00)	\leftarrow	CS 113 - Basic Data Structures and Algorithms (3.00)
CSE 15L - Software Tools and Techniques Laboratory (2.00)	\leftarrow	No Course Articulated

CSE 20 - Discrete Mathematics (4.00) Same-As: MATH 15A	←	MATH 226 - Discrete Mathematics (4.00) Or CS 226 - Discrete Structures (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	CS 220 - Computer Architecture and Assembly Language (3.00)

MATH 18 - Linear Algebra (4.00)	\leftarrow	MATH 270 - Linear Algebra (4.00)
		Or
		MATH 270H - Linear Algebra (Honors) (4.00)
MATH 20A - Calculus for Science and Engineering (4.00)	\leftarrow	MATH 150 - Calculus and Analytic Geometry I (5.00)
		Or
		MATH 150H - Calculus and Analytic Geometry I (Honors) (5.00)
MATH 20B - Calculus for Science and Engineering (4.00)	\leftarrow	MATH 155 - Calculus and Analytic Geometry II (4.00)
		Or
		MATH 155H - Calculus and Analytical Geometry II (Honors) (4.00)
MATH 20C - Calculus and Analytic Geometry for Science and	\leftarrow	MATH 260 - Calculus and Analytic Geometry III (4.00)
Engineering (4.00)		Or
		MATH 260H - Calculus and Analytic Geometry III (Honors) (4.00)

Select 2 Course(s) from the following		
BILD 1 - The Cell (4.00)	BIO 202 - Foundations of Biology: Evolution, Biodiversity and Organismal Biology (4.00)	
	And	
	BIO 204 - Foundations of Biology: Biochemistry, Cell Biology, Genetics and Molecular Biology (4.00)	
	Or	
	BIO 204H - Foundations of Biology: Biochemistry, Cell Biology, Genetics, and Molecular Biology(Honors) (4.00)	
BILD 2 - Multicellular Life (4.00)	BIO 202 - Foundations of Biology: Evolution, Biodiversity and Organismal Biology (4.00)	
	And	
	BIO 204 - Foundations of Biology: Biochemistry, Cell Biology, Genetics and Molecular Biology (4.00)	
	Or	
	BIO 204H - Foundations of Biology: Biochemistry, Cell Biology, Genetics, and Molecular Biology(Honors) (4.00)	
BILD 3 - Organismic and Evolutionary Biology (4.00)	BIO 202 - Foundations of Biology: Evolution, Biodiversity and Organismal Biology (4.00)	
	And	
	BIO 204 - Foundations of Biology: Biochemistry, Cell Biology, Genetics and Molecular Biology (4.00)	
	Or	
	BIO 204H - Foundations of Biology: Biochemistry, Cell Biology, Genetics, and Molecular Biology(Honors) (4.00)	
CHEM 6A - General Chemistry I (4.00)	CHEM 150 - General Chemistry I: For Science Majors (5.00) Or	
	CHEM 150H - General Chemistry I : For Science Majors (Honors) (5.00)	

CHEM 6B - General Chemistry II (4.00)	,
	CHEM 150 - General Chemistry I: For Science Majors (5.00)
	And
	CHEM 151 - General Chemistry II: For Science Majors (5.00)
	Or
	CHEM 150H - General Chemistry I : For Science Majors (Honors) (5.00)
	And
	CHEM 151H - General Chemistry II : For Science Majors (Honors) (5.00)
PHYS 2A - Physics - Mechanics (4.00)	← PHYS 151 - Principles of Physics I (4.00)
	Or
	PHYS 151H - Principles of Physics I (Honors) (4.00)
PHYS 2B - Physics - Electricity and Magnetism (4.00)	← PHYS 152 - Principles of Physics II (4.00)
	Or
	PHYS 152H - Principles of Physics II (Honors) (4.00)

END OF AGREEMENT