Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, San Diego 2022-2023 General Catalog, Quarter	From: De Anza College 2022-2023 General Catalog, Quarter

Mathematics/Secondary Education B.A.

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**

This major offers an excellent preparation for students with a substantial
interest in teaching Mathematics in secondary schools. Students interested in
ultimately earning a California teaching credential are advised to take this
program.

Note: CSE 11 or CSE 8A + 8B or ECE 15 are not required but strongly recommended.

For more information please visit
https://math.ucsd.edu/students/undergraduate/ma32-math-secondary-education-b-a/
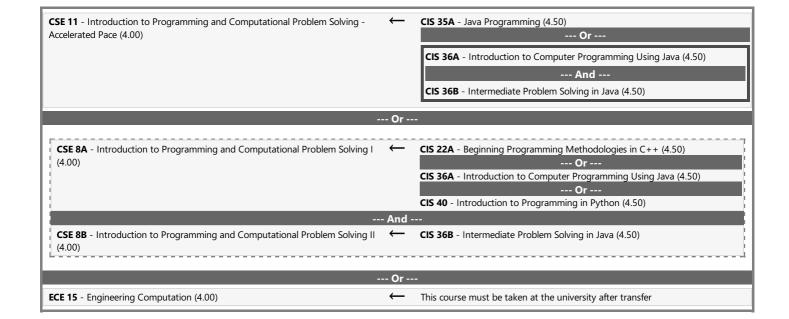
**NOTE: Students who have taken a vector calculus course at a non-UC college must
successfully petition the course for 20E equivalency. Petitions must generally
include course syllabus, textbook information and final exam. More information on
the petition process for 20E can be found at the following site:
https://www.math.ucsd.edu/students/undergraduate/math-20e-equivalency**

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

UCSD		De Anza College
MATH 18 - Linear Algebra (4.00)	←	**MATH 2B** - Linear Algebra (5.00)
		--- Or ---
		MATH 2BH - Linear Algebra - HONORS (5.00)
MATH 20A - Calculus for Science and Engineering (4.00)	←	**MATH 1A** - Calculus (5.00)
		--- Or ---
		MATH 1AH - Calculus - HONORS (5.00)
MATH 20B - Calculus for Science and Engineering (4.00)	←	**MATH 1B** - Calculus (5.00)
		--- Or ---
		MATH 1BH - Calculus - HONORS (5.00)
MATH 20C - Calculus and Analytic Geometry for Science and Engineering (4.00)	←	**MATH 1C** - Calculus (5.00) --- And --- **MATH 1D** - Calculus (5.00)
		--- Or ---
		MATH 1CH - Calculus - HONORS (5.00) --- And --- **MATH 1DH** - Calculus - HONORS (5.00)
MATH 20D - Introduction to Differential Equations (4.00)	←	**MATH 2A** - Differential Equations (5.00)
		--- Or ---
		MATH 2AH - Differential Equations - HONORS (5.00)
MATH 20E - Vector Calculus (4.00) • *Petition department after transfer*	←	No Course Articulated

CSE 11 - Introduction to Programming and Computational Problem Solving - Accelerated Pace (4.00)	←	CIS 35A - Java Programming (4.50)
		--- Or ---
		CIS 36A - Introduction to Computer Programming Using Java (4.50)
		--- And ---
		CIS 36B - Intermediate Problem Solving in Java (4.50)

--- Or ---

CSE 8A - Introduction to Programming and Computational Problem Solving I (4.00)	←	CIS 22A - Beginning Programming Methodologies in C++ (4.50)
		--- Or ---
		CIS 36A - Introduction to Computer Programming Using Java (4.50)
		--- Or ---
		CIS 40 - Introduction to Programming in Python (4.50)

--- And ---

| CSE 8B - Introduction to Programming and Computational Problem Solving II (4.00) | ← | CIS 36B - Intermediate Problem Solving in Java (4.50) |

--- Or ---

| ECE 15 - Engineering Computation (4.00) | ← | This course must be taken at the university after transfer |

END OF AGREEMENT