

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

ECE: Computer Engineering B.S.

GENERAL INFORMATION

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

Effective Fall 2017, major preparation will be required for this major. For details, visit: <http://admissions.ucsd.edu/MajorPrep>

General Advice: Transfer students must have completed the following courses in order to be considered for admission to Computer Engineering.

- Calculus I-for Science and Engineering (Math. 20A)
- Calculus II-for Science and Engineering (Math. 20B)
- Calculus and Analytic Geometry (Math. 20C)
- Differential Equations (Math. 20D)
- Linear Algebra (Math. 18)
- Complete calculus-based physics series (Physics 2A-B-C)
- Introductory computer programming language (Java, C, or C++)

For more information please visit <http://ece.ucsd.edu/undergraduate/transfer-students>

NOTE: Articulation of engineering coursework will be subject to thorough review and evaluation.

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

ECE 35 - Introduction to Analog Design (4.00)	← This course must be taken at the university after transfer
ECE 45 - Circuits and Systems (4.00)	← This course must be taken at the university after transfer
ECE 65 - Components and Circuits Lab (4.00)	← This course must be taken at the university after transfer

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 ---

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)

CSE 12 - Basic Data Structures and Object-Oriented Design (4.00)	←	<div> CIS 22C - Data Abstraction and Structures (4.50)</div> <div>--- And ---</div> <div> CIS 28 - Object Oriented Analysis and Design (4.50)</div> <div>--- Or ---</div> <div> CIS 22CH - Data Abstraction and Structures - HONORS (4.50)</div> <div>--- And ---</div> <div> CIS 28 - Object Oriented Analysis and Design (4.50)</div>
CSE 15L - Software Tools and Techniques Laboratory (2.00)	←	No Course Articulated
CSE 20 - Discrete Mathematics (4.00) Same-As: MATH 15A	←	MATH 22 - Discrete Mathematics (5.00)
		--- Or ---
		MATH 22H - Discrete Mathematics - HONORS (5.00)
CSE 21 - Mathematics for Algorithms and Systems (4.00)	←	No Course Articulated
CSE 30 - Computer Organization and Systems Programming (4.00)	←	<div> CIS 21JA - Introduction to x86 Processor Assembly Language and Computer Architecture (4.50)</div> <div>--- And ---</div> <div> CIS 21JB - Advanced x86 Processor Assembly Programming (4.50)</div> <div>--- And ---</div> <div> CIS 26B - Advanced C Programming (4.50)</div> <div>--- Or ---</div> <div> CIS 21JA - Introduction to x86 Processor Assembly Language and Computer Architecture (4.50)</div> <div>--- And ---</div> <div> CIS 21JB - Advanced x86 Processor Assembly Programming (4.50)</div> <div>--- And ---</div> <div> CIS 26BH - Advanced C Programming - HONORS (4.50)</div>

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)	←	<div> MATH 1C - Calculus (5.00)</div> <div>--- And ---</div> <div> MATH 1D - Calculus (5.00)</div> <div>--- Or ---</div> <div> MATH 1CH - Calculus - HONORS (5.00)</div> <div>--- And ---</div> <div> MATH 1DH - Calculus - HONORS (5.00)</div>
MATH 20D - Introduction to Differential Equations (4.00)	←	MATH 2A - Differential Equations (5.00)
		--- Or ---
		MATH 2AH - Differential Equations - HONORS (5.00)

PHYS 2A - Physics - Mechanics (4.00)	←	PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)
PHYS 2B - Physics - Electricity and Magnetism (4.00)	←	PHYS 4B - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

PHYS 2C - Physics - Fluids, Waves, Thermodynamics, and Optics
(4.00)



PHYS 4C - Physics for Scientists and Engineers: Fluids, Waves, Optics
and Thermodynamics (6.00)

END OF AGREEMENT