# **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: Electrical 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: <a href="http://admissions.ucsd.edu/MajorPrep">http://admissions.ucsd.edu/MajorPrep</a>

**General Advice:** Transfer students must have completed the following courses in order to be considered for admission to this major.

- 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) Note: An equivalent to UCSD's PHYS 2D is strongly recommended although it is not considered for screening purposes.
- Chemistry I-for Science and Engineering (Chemistry 6A)
- Introductory computer programming language (Java, C, or C++)

Course Note: ECE 15 and 35 must be taken at UCSD. Students who have taken a C programming or circuits course at a non-UC college must pass the ECE 15 or 35 Waiver Exam to receive transfer credit for UCSD ECE 15 or 35. These are NOT placement tests. For more information, go to <a href="http://www.ece.ucsd.edu/undergraduate/ece-15-35-waiver-exams">http://www.ece.ucsd.edu/undergraduate/ece-15-35-waiver-exams</a>

#### Special Advising Note:

All transfer students should understand that the lower-division curriculum is demanding. Transfer students will be required to complete all lower-division requirements or their equivalent courses. The ECE department has a recommended schedule for transfer students (please consult the ECE website, <a href="http://www.ece.ucsd.edu">http://www.ece.ucsd.edu</a>, for sample recommended course schedules and for the ECE course requirement guide).

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) <a href="https://www.ucsd.edu/catalog/pdf/APC-chart.pdf">https://www.ucsd.edu/catalog/pdf/APC-chart.pdf</a>

International Baccalaureate (IB) https://catalog.ucsd.edu/ files/international-baccalaureate-credits-chart.pdf

## **LOWER DIVISION MAJOR REQUIREMENTS**

ECE 5 - Introduction to Electrical and Computer Engineering (4.00)	$\leftarrow$	This course must be taken at the university after transfer
ECE 15 - Engineering Computation (4.00)	$\leftarrow$	This course must be taken at the university after transfer
ECE 25 - Introduction to Digital Design (4.00)	$\leftarrow$	This course must be taken at the university after transfer
ECE 30 - Introduction to Computer Engineering (4.00)	$\leftarrow$	No Course Articulated
ECE 35 - Introduction to Analog Design (4.00)	$\leftarrow$	This course must be taken at the university after transfer
ECE 45 - Circuits and Systems (4.00)	$\leftarrow$	This course must be taken at the university after transfer
ECE 65 - Components and Circuits Lab (4.00)	$\leftarrow$	This course must be taken at the university after transfer

CHEM 6A - General Chemistry I (4.00)	← CHEM 1A - General Chemistry (5.00)
	Or
	CHEM 1AH - General Chemistry - HONORS (5.00)

MATH 18 - Linear Algebra (4.00)	$\leftarrow$	MATH 2B - Linear Algebra (5.00)
		Or MATH 2BH - Linear Algebra - HONORS (5.00)
MATH 20A - Calculus for Science and Engineering (4.00)	<b>←</b>	MATH 1A - Calculus (5.00)
		Or
		MATH 1AH - Calculus - HONORS (5.00)
MATH 20B - Calculus for Science and Engineering (4.00)	$\leftarrow$	MATH 1B - Calculus (5.00)
		Or MATH 1BH - Calculus - HONORS (5.00)
MATH 20C - Calculus and Analytic Geometry for Science and	$\leftarrow$	MATH 1C - Calculus (5.00)
Engineering (4.00)		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)	$\leftarrow$	MATH 2A - Differential Equations (5.00)
		Or
		MATH 2AH - Differential Equations - HONORS (5.00)
MATH 20E - Vector Calculus (4.00)	$\leftarrow$	No Course Articulated
<ul> <li>Articulation is subject to placement by proficiency exam</li> </ul>		
Petition department after transfer		
PHYS 2A - Physics - Mechanics (4.00)	<b>←</b>	PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)

PHYS 2A - Physics - Mechanics (4.00)	<b>←</b>	PHYS 4A - Physics for Scientists and Engineers: Mechanics (6.00)
PHYS 2B - Physics - Electricity and Magnetism (4.00)	<b>←</b>	<b>PHYS 4B</b> - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)
<b>PHYS 2C</b> - Physics - Fluids, Waves, Thermodynamics, and Optics (4.00)	<b>←</b>	<b>PHYS 4C</b> - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)
PHYS 2D - Physics - Relativity and Quantum Physics (4.00)	<b>←</b>	<b>PHYS 4D</b> - Physics for Scientists and Engineers: Modern Physics (6.00)

## **END OF AGREEMENT**