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: Engineering Physics 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 Engineering Physics.

- 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 with lab experience (Physics 2A-B-C-BL or CL)
  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 http://www.ece.ucsd.edu/undergraduate/ece-15-35-waiver-exams

Special Advising Note:

All transfer students should understand that the lower-division curriculum is demanding. Transfer students will be required to take all lower-division requirements or their equivalent. The ECE department has a recommended schedule for transfer students (please consult the ECE website, http://www.ece.ucsd.edu, 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) 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 15 - Engineering Computation (4.00)	←	This course must be taken at the university after transfer
ECE 25 - Introduction to Digital Design (4.00)	←	This course must be taken at the university after transfer
ECE 30 - Introduction to Computer Engineering (4.00)	←	No Course Articulated
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

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)	←	**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) • *Articulation is subject to placement by proficiency exam* • *Petition department after transfer*	←	No Course Articulated

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)
PHYS 2D - Physics - Relativity and Quantum Physics (4.00)	←	**PHYS 4D** - Physics for Scientists and Engineers: Modern Physics (6.00)
PHYS 2DL - Physics Laboratory-Modern Physics (2.00)	←	**PHYS 4D** - Physics for Scientists and Engineers: Modern Physics (6.00)

END OF AGREEMENT