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

Bioengineering: BioSystems 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 the Bioengineering: BioSystems major at UC San Diego.

- 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)
- Calculus-based physics series
  (Physics 2A and 2B)
- Chemistry 6A and 6B

Admission Requirements:

Prospective transfer students are able to apply for "direct admission" into the Bioengineering: BioSystems major by indicating their choice on the Undergraduate Admissions Application. Effective Fall 2015, the only way to become a Bioengineering: BioSystems major is to be directly admitted from community college as an entering transfer student. Although the actual GPA cutoff depends on the number of openings, at least a 3.2 GPA in the community college transfer courses and a 3.4 GPA in the above screening courses are needed to gain admission.

Prospective transfer students who have taken equivalent courses elsewhere (at institutions not appearing on ASSIST), may request to have transfer credit applied toward the department's major requirements by submitting an "Undergraduate Student Petition" together with a transcript and catalog course description from the institution where the course(s) were taken. These documents are reviewed for approval by the relevant UCSD department and the Bioengineering Undergraduate Studies Committee. "Undergraduate Student Petitions" are available online at http://students.ucsd.edu/my-tritonlink/forms/index.html and in the Student Affairs Office. This degree is accredited by the Accreditation Board for Engineering and Technology (ABET).

For additional information, please see the Bioengineering Department's Undergraduate Program website at http://be.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

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

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

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 2BL - Physics Laboratory - Mechanics (2.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (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 2CL - Physics Laboratory - Electricity and Magnetism (2.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

BENG 1 - Introduction to Bioengineering (2.00)	←	This course must be taken at the university after transfer
BENG 2 - Introductory Computer Programming and MATLAB (2.00)	←	This course must be taken at the university after transfer

END OF AGREEMENT