Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Santa Barbara 2022-2023 General Catalog, Quarter	From: Glendale Community College 2022-2023 General Catalog, Semester

Computer Science, B.S.

GENERAL INFORMATION FOR ALL MAJORS

All transfer applicants must satisfy University of California admissions eligibility requirements as well as meeting campus admission selection criteria. Completing the UC transfer admission requirements in English and mathematics by the end of the fall term prior to the fall application quarter makes an applicant more competitive for admission to UCSB. All admission requirements must be completed by the end of spring prior to transfer. For more information on UC admissions eligibility requirements and admission to UCSB, please visit the Admissions website: www.admissions.ucsb.edu

This articulation agreement lists course-to-course or sequence-to-sequence substitutions for preparation in the major. **Transfer students are strongly encouraged to complete as many major preparatory courses as possible prior to enrolling at UCSB. Completion of all major preparatory courses is not an admissions requirement, but some majors require certain courses to be completed prior to transfer with a specified GPA, and completion or near completion of major preparatory courses will help students move more efficiently toward graduation after transfer.**

Please note that the course "equivalencies" do not necessarily apply to UCSB general education. For information concerning satisfaction of UCSB general education requirements, please refer to the General Education/Breadth articulation agreement.

Advanced Placement (AP) and **International Baccalaureate (IB)** exams may or may not be used to meet course requirements, depending on the exam. Please refer to the AP Chart and IB Chart in the UCSB General Catalog for information on how we use AP and IB exams.

GENERAL EDUCATION FOR THE COLLEGE OF ENGINEERING

General Education Information: Students should focus on completing major preparation requirements. If time permits, students may also take courses to fulfill either UCSB General Education requirements or IGETC (Intersegmental General Education Transfer Curriculum). Students who will not complete IGETC prior to transfer should refer to the College of Engineering General Education articulation agreement. UCSB's General Education requirements do not need to be completed prior to transfer, but students who choose to follow College of Engineering General Education should complete two to three General Education courses prior to transfer. For more information concerning satisfaction of UCSB General Education requirements, student may also refer to the General Engineering Academic Requirements (GEAR) publicaton at https://engineering.ucsb.edu/undergraduate/academic-advising/gear-publications

COMPUTER SCIENCE, B.S.

Please visit the department's website to learn more about this major: www.cs.ucsb.edu

ADMISSION SELECTION CRITERIA: Applicants to the Computer Science major who complete the equivalent of all the **REQUIRED** UCSB major preparation courses and as many of the **STRONGLY RECOMMENDED** courses as possible with a major prep GPA of 3.7 or higher are the most competitive for admission.

Applicants without all of the **REQUIRED** courses will be reviewed for admission, but will have less competitive applications.

Courses for the major taken prior to admission must be completed with no grades lower than "C".

REQUIRED base preparation courses

- Math 3A, 3B, 4A, 4B
- Physics 1, 2, 3, 3L
- Computer Science 16, 24, 40

STRONGLY RECOMMENDED advanced preparation courses

- Computer Science 32, 64
- Math 6A

Additional major preparation courses

- PSTAT 120A

You may attend more than one California community college to earn credit for the required major preparation courses if the courses are not offered or if your schedule constrains you from completing them at your own campus. However, students are strongly encouraged to complete the physics series at a single school to prevent missing content.

REQUIRED BASE PREPARATION COURSES

****REFER TO TOP OF AGREEMENT****

Required for admission

MATH 3A - Calculus with Applications, First Course (4.00) ← **MATH 103E** - Calculus and Analytic Geometry (5.00)

--- Or ---

MATH 103E H - Honors Calculus and Analytic Geometry (5.00)

Required for admission

MATH 3B - Calculus with Applications, Second Course (4.00) ← **MATH 104E** - Calculus and Analytic Geometry (5.00)

--- Or ---

MATH 104E H - Honors Calculus and Analytic Geometry (5.00)

Required for admission

MATH 4A - Linear Algebra with Applications (4.00) ← **MATH 107** - Linear Algebra (5.00)

--- Or ---

MATH 107H - Honors Linear Algebra (5.00)

Required for admission

MATH 4B - Differential Equations (4.00) ← **MATH 108** - Ordinary Differential Equations (5.00)

--- Or ---

MATH 108H - Honors Ordinary Differential Equations (5.00)

Required for admission
An AP exam cannot be used to satisfy this course requirement
An IB exam cannot be used to satisfy this course requirement

PHYS 1 - Basic Physics (4.00) ← **PHY 101** - Physics for Scientists and Engineers: A (5.00)

--- Or ---

PHY 101H - Honors Physics for Scientists and Engineers: A (5.00)

Required for admission
An AP exam cannot be used to satisfy this course requirement
An IB exam cannot be used to satisfy this course requirement

PHYS 2 - Basic Physics (4.00) ←

PHY 101 - Physics for Scientists and Engineers: A (5.00)

--- And ---

PHY 102 - Physics for Scientists and Engineers: B (5.00)

--- And ---

PHY 103 - Physics for Scientists and Engineers: C (5.00)

--- Or ---

PHY 101H - Honors Physics for Scientists and Engineers: A (5.00)

--- And ---

PHY 102 - Physics for Scientists and Engineers: B (5.00)

--- And ---

PHY 103 - Physics for Scientists and Engineers: C (5.00)

Required for admission
An AP exam cannot be used to satisfy this course requirement
An IB exam cannot be used to satisfy this course requirement

PHYS 3 - Basic Physics (3.00)

--- And ---

PHYS 3L - Physics Laboratory (1.00) ←

PHY 101 - Physics for Scientists and Engineers: A (5.00)

--- And ---

PHY 102 - Physics for Scientists and Engineers: B (5.00)

--- Or ---

PHY 101H - Honors Physics for Scientists and Engineers: A (5.00)

--- And ---

PHY 102 - Physics for Scientists and Engineers: B (5.00)

Required for admission

CMPSC 16 - Problem Solving with Computers I (4.00) ← **CS/IS 135** - Programming in C/C++ (3.00)

Required for admission

CMPSC 24 - Problem Solving with Computers II (4.00) ← No Course Articulated

Required for admission

CMPSC 40 - Foundations of Computer Science (5.00) ← **CS/IS 125** - Discrete Structures for Computing (4.00)

STRONGLY RECOMMENDED ADVANCED PREPARATION COURSES

****REFER TO TOP OF AGREEMENT****
Recommended to be completed prior to transfer

CMPSC 32 - Object Oriented Design and Implementation (4.00)	←	**CS/IS 137** - C++ and Advanced Topics (4.00)

Recommended to be completed prior to transfer

CMPSC 64 - Computer Organization and Logic Design (4.00)	←	**CS/IS 165** - Computer Architecture and Assembly Language (4.00)

Recommended to be completed prior to transfer

MATH 6A - Vector Calculus with Applications, First Course (4.00)	←	**MATH 105** - Multivariable and Vector Calculus (5.00) **--- Or ---** **MATH 105H** - Honors Multivariable and Vector Calculus (5.00)

ADDITIONAL MAJOR PREPARATION COURSES

PSTAT 120A - Probability and Statistics (4.00)	←	This Course is Never Articulated

END OF AGREEMENT