Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Santa Cruz 2022-2023 General Catalog, Quarter	From: Santa Monica 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 meet campus selection criteria. 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 UC Santa Cruz, please visit the Admissions website: https://admissions.ucsc.edu/attend-ucsc/transfer-students.

This articulation agreement lists course-to-course, sequence-to-sequence or requirement substitutions for preparation in the major. **Transfer students are strongly encouraged to complete as many major preparatory courses as possible prior to enrolling at UCSC. 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.**

UC Santa Cruz Advanced Placement (AP) and International Baccalaureate (IB) credit policies are detailed in the link below:

UC Santa Cruz AP/IB Chart 2022-2023

COMPUTER SCIENCE B.S.

Please visit the department's website to learn more about this major: https://undergrad.soe.ucsc.edu

ADMISSION SELECTION CRITERIA

To be considered for admission to the Computer Science B.S. major, transfer students must have completed the following five courses or their articulated equivalents with an overall GPA of **3.0** or higher in the courses:

CSE 30: Programming Abstractions: Python

CSE 13S: Computer Systems and C Programming

MATH 19A: Calculus for Science, Engineering, and Mathematics

MATH 19B: Calculus for Science, Engineering, and Mathematics

Plus one of the following options:

CSE 12: Computer Systems and Assembly Language and Lab **OR** CSE 16: Applied Discrete Mathematics

Three of the five required courses must be completed by the end of the fall term of the previous academic year to when the student plans to enter UC Santa Cruz, with a minimum 3.0 GPA over all completed CS major qualification courses at that time.

ADDITIONAL INFORMATION FOR TRANSFER

A student lacking one of these five courses may be admitted if they have completed CSE 16 and CSE 12 or their articulated equivalents. Transfer students applying for the fall term must have completed at least three of the five required courses by the end of the fall term prior to transfer, with an overall GPA of 3.0 or higher in the three courses.

Transfer students admitted for the winter term must satisfy the major preparation criteria for transfer students admitted for the fall term, and additionally must have successfully completed at least two additional courses that are required for the proposed degree prior to admission. It is highly recommended that these two courses should be AM 10: Mathematical Methods for Engineers I (or MATH 21: Linear Algebra) and AM 30: Multivariate Calculus for Engineers (or MATH 23A: Vector Calculus).

Transfer students are strongly recommended to complete CSE 16 as part of their required screening courses, and to complete most of the general education requirements prior to arriving at UC Santa Cruz, as well as one of the following courses:

MATH 21: Linear Algebra

AM 10: Mathematical Methods for Engineers I

MATH 23A: Vector Calculus

AM 30: Multivariate Calculus for Engineers

Transfer students who are not familiar with both an object-oriented language and C may need to take a remedial course. Students familiar with C++ and Unix should find the transition to Python and C relatively simple.

THIS IS A SCREENING MAJOR. For more information on screening major requirements please visit the Admissions website: https://admissions.ucsc.edu/posts/screening-major-selection-criteria

MAJOR PREPARATION COURSES REQUIRED FOR TRANSFER

CSE 30 - Programming Abstractions: Python (7.00)	←	**CS 20A** - Data Structures with C++ (3.00) • *Minimum grade required: B or better* **--- Or ---** **CS 20B** - Data Structures with JAVA (3.00) • *Minimum grade required: B or better* **--- And ---** **CS 50** - C Programming (3.00) • *Minimum grade required: B or better*
CSE 13S - Computer Systems and C Programming (7.00)	←	**CS 52** - C++ Programming (3.00)
MATH 19A - Calculus for Science, Engineering, and Mathematics (5.00)	←	**MATH 7** - Calculus 1 (5.00) **--- And ---** **MATH 8** - Calculus 2 (5.00)
MATH 19B - Calculus for Science, Engineering, and Mathematics (5.00)	←	**MATH 7** - Calculus 1 (5.00) **--- And ---** **MATH 8** - Calculus 2 (5.00)
CSE 12 - Computer Systems and Assembly Language and Lab (7.00)	←	**CS 18** - Advanced Assembly Language Programming (3.00) **--- Or ---** **CS 17** - Assembly Language Programming (3.00) **--- And ---** **CS 42** - Digital Logic (3.00)
--- Or ---		
CSE 16 - APPLIED DISCRETE MATHEMATICS (5.00)	←	**MATH 10** - Discrete Structures (3.00)

STRONGLY RECOMMENDED ADVANCED PREPARATION COURSES

AM 10 - Mathematical Methods for Engineers I (5.00)	←	**MATH 13** - Linear Algebra (3.00)
--- Or ---		
MATH 21 - Linear Algebra (5.00)	←	**MATH 13** - Linear Algebra (3.00)

AM 30 - Multivariate Calculus for Engineers (5.00)	←	**MATH 11** - Multivariable Calculus (5.00)
--- Or ---		
MATH 23A - Vector Calculus (5.00)	←	**MATH 11** - Multivariable Calculus (5.00)

END OF AGREEMENT