Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Long Beach 2022-2023 General Catalog, Semester	From: Orange Coast College 2022-2023 General Catalog, Semester

Computer Science

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

GENERAL INFORMATION 2022-23

Important Admissions Information for Fall 2023

ALL MAJORS ARE IMPACTED AT CSU, LONG BEACH. As a result, incoming students must complete a series of major specific preparation coursework and meet GPA requirements. Please visit our Major Specific Degree Requirements webpage for more information and to find the correct path and year for your major.

Review the following for information related to transfer admissions to CSULB:

- Transfer Admission Eligibility Overview
- Transfer Application Process
- Lower Division Requirements Information for Major Agreements

GENERAL INFORMATION - DEGREE NOTES

Degree Progress: Transfer students must complete the following requirements within one calendar year of declaring the major: A grade of C or better must be achieved in MATH 123 (Calculus II) and PHYS 151 (Mechanics and Heat) within one calendar year after transfer to CSULB (if the equivalent was not taken before transfer). Questions can be directed to the College of Engineering Recruitment and Retention Center at (562) 985-1800 or coe-admit@csulb.edu.

ENGR 101 and 102 are substituted for transfer students who have three units of CSU GE Area E.

Special Notes: A grade of "C" or better is required in all required and elective courses.

LOWER DIVISION CORE REQUIREMENTS, TAKE ALL OF THE FOLLOWING COURSES:

Minimum grade required: C or better
Please refer to additional important General Information section above

CECS 105 - Introduction to Computer Engineering and Computer Science (1.00)	←	No Course Articulated
CECS 174 - Introduction to Programming and Problem Solving (3.00)	←	**CS A131** - Python Programming 1 (4.00)
		--- Or ---
		CS A150 - C++ Programming Language 1 (4.00)
		--- Or ---
		CS A170 - Java Programming 1 (4.00)
CECS 225 - Digital Logic and Assembly Programming (3.00)	←	**CS A216** - Computer Architecture (4.00)
CECS 228 - Discrete Structures with Computing Applications (3.00)	←	**CS A262** - Discrete Structures (3.00)
		--- Or ---
		MATH A230 - Introduction to Discrete Mathematics (5.00)
CECS 229 - Discrete Structures with Computing Applications II (3.00)	←	**MATH A235** - Applied Linear Algebra (3.00)
		--- Or ---
		MATH A285 - Introduction to Linear Algebra and Differential Equations (4.00)
		--- Or ---
		MATH A285H - Honors Introduction to Linear Algebra and Differential Equations (5.00)
CECS 274 - Data Structures (3.00)	←	**CS A200** - Data Structures (4.00)
		--- Or ---
		CS A132 - Programming Concepts and Methodology 2 (4.00)
CECS 277 - Object Oriented Application Development (3.00)	←	**CS A272** - Java Programming 2 (4.00)

ENGR 101 - Introduction to Engineering Profession (1.00) Same-As: ENGR 101H • *Please refer to additional important General Information section above*	←	No Course Articulated
ENGR 102 - Academic Success Skills (1.00) Same-As: ENGR 102H • *Please refer to additional important General Information section above*	←	No Course Articulated
MATH 122 - Calculus I (4.00)	←	MATH A180 - Calculus 1 (4.00)
		--- Or ---
		MATH A180H - Honors Calculus 1 (4.00)
		--- Or ---
		MATH A182H - Honors Calculus 1 and 2 (5.00)
MATH 123 - Calculus II (4.00) • *Please refer to additional important General Information section above*	←	MATH A185 - Calculus 2 (4.00)
		--- Or ---
		MATH A185H - Honors Calculus 2 (4.00)
		--- Or ---
		MATH A182H - Honors Calculus 1 and 2 (5.00)

APPROVED SCIENCES ELECTIVES (MINIMUM OF EIGHT UNITS), TAKE:

Please refer to additional important General Information section above

PHYS 151 - Mechanics and Heat (4.00) • *Please refer to additional important General Information section above*	←	PHYS A185 - Calculus-Based Physics: Mechanics (4.00)
		--- Or ---
		PHYS A185H - Calculus-Based Physics: Mechanics Honors (4.00)
--- Or ---		
CHEM 111A - General Chemistry (5.00)	←	CHEM A180 - General Chemistry A (5.00)

REMAINING UNITS TO BE CHOSEN FROM THE FOLLOWING:

Please refer to additional important General Information section above

BIOL 200 - General Biology (4.00)	←	BIOL A100 - Principles of Biology (4.00)
		--- Or ---
		BIOL A100H - Principles of Biology Honors (4.00)
BIOL 205 - Human Biology (4.00)	←	BIOL A221 - Introduction to Anatomy & Physiology (4.00)
BIOL 207 - Human Physiology (4.00)	←	BIOL A225 - Human Physiology (5.00)

END OF AGREEMENT