Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Long Beach 2022-2023 General Catalog, Semester	From: East Los Angeles 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 113** - Programming in JAVA (3.00) --- Or --- **CS 116** - Programming in C++ (3.00) --- Or --- **CS 119** - Programming in Python (3.00) --- Or --- **ENG GEN 121** - Programming for Engineers: C++ (4.00) --- Or --- **MATH 173** - Object-Oriented Programming and Design (4.00)
CECS 225 - Digital Logic and Assembly Programming (3.00)	←	**CS 130** - Introduction to Computer Architecture and Organization (3.00)
CECS 228 - Discrete Structures with Computing Applications (3.00)	←	**CS 131** - Discrete Structures for Computer Science (3.00) --- Or --- **MATH 272** - Methods of Discrete Mathematics (5.00)
CECS 229 - Discrete Structures with Computing Applications II (3.00)	←	**MATH 270** - Linear Algebra (3.00)
CECS 274 - Data Structures (3.00)	←	No Course Articulated
CECS 277 - Object Oriented Application Development (3.00)	←	No Course Articulated
ENGR 101 - Introduction to Engineering Profession (1.00) Same-As: ENGR 101H • *Please refer to additional important General Information section above*	←	**ENG GEN 101** - Introduction to Science - Engineering and Technology (2.00)

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 261** - Calculus I (5.00)

MATH 123 - Calculus II (4.00)
- *Please refer to additional important General Information section above*

← **MATH 262** - Calculus II (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*

← **PHYSICS 101** - Physics for Engineers and Scientists I (5.00)

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CHEM 111A - General Chemistry (5.00)

← **CHEM 101** - General Chemistry I (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)

← **BIOLOGY 003** - Introduction to Biology (4.00)

BIOL 205 - Human Biology (4.00)

← No Course Articulated

BIOL 207 - Human Physiology (4.00)

← **PHYSIOL 001** - Introduction to Human Physiology (4.00)

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BIOLOGY 020 - Human Anatomy and Physiology (8.00)

END OF AGREEMENT