

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Long Beach
2022-2023 General Catalog, Semester

From: Long Beach City 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)	←	COSP 7 - Programming concepts and Methodologies (4.00) --- Or --- CS 11 - Introduction to Computer Science-C++ (3.00) --- Or --- CS 21 - Introduction to Computer Science-Java (3.00)
CECS 225 - Digital Logic and Assembly Programming (3.00)	←	CS 51 - Introduction to Computer Architecture (3.00)
CECS 228 - Discrete Structures with Computing Applications (3.00)	←	CS 61 - Discrete Structures (3.00)
CECS 229 - Discrete Structures with Computing Applications II (3.00)	←	MATH 84 - Intro to Differential Equations and Linear Algebra (5.00)
CECS 274 - Data Structures (3.00)	←	CS 22 - Data Structures and Algorithms (3.00)
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	←	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 60 - First Calculus Course (5.00) --- Or --- MATH 60H - Honors First Calculus Course (5.00)

MATH 123 - Calculus II (4.00)

- *Please refer to additional important General Information section above*

**MATH 70** - Second Calculus Course (5.00)

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MATH 70H - Honors Second Calculus Course (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 3A** - Physics for Sci & Eng. - Mechanics (5.50)

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CHEM 111A - General Chemistry (5.00)**CHEM 1A** - General Chemistry (5.50)**REMAINING UNITS TO BE CHOSEN FROM THE FOLLOWING:**

Please refer to additional important General Information section above

BIOL 200 - General Biology (4.00)**BIO 41** - Contemporary Biology (3.00)

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BIO 41L - Contemporary Biology Laboratory (1.00)

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BIO 41H - Honors Contemporary Biology (3.00)

--- And ---

BIO 41L - Contemporary Biology Laboratory (1.00)

--- Or ---

BIO 41H - Honors Contemporary Biology (3.00)

--- And ---

BIO 41LH - Honors Contemporary Biology Lab (1.00)**BIOL 205** - Human Biology (4.00)**ANAT 41** - Anatomy and Physiology (5.00)

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BIO 60 - Human Biology 1 (4.00)

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BIO 60L - Human Biology 1 Laboratory (1.00)**BIOL 207** - Human Physiology (4.00)**PHYSI 1** - Human Physiology (5.00)**END OF AGREEMENT**