Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Long Beach 2022-2023 General Catalog, Semester	From: El Camino 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)	←	**COMP SCI 1** - Problem Solving and Program Design Using C++ (4.00) --- Or --- **COMP SCI 3** - Computer Object-Oriented Programming in Java (4.00) --- Or --- **COMP SCI 14** - Introduction to Programming with Python (4.00)
CECS 225 - Digital Logic and Assembly Programming (3.00)	←	**COMP SCI 16** - Assembly Language Programming for the x86 (IBM PC) Processors (4.00)
CECS 228 - Discrete Structures with Computing Applications (3.00)	←	**MATH 210** - Introduction to Discrete Structures (5.00)
CECS 229 - Discrete Structures with Computing Applications II (3.00)	←	**MATH 270** - Differential Equations with Linear Algebra (5.00)
CECS 274 - Data Structures (3.00)	←	**COMP SCI 2** - Introduction to Data Structures (5.00)
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*	←	**ENGR 1** - Introduction to Engineering (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 190** - Single Variable Calculus and Analytic Geometry I (5.00)
MATH 123 - Calculus II (4.00) • *Please refer to additional important General Information section above*	←	**MATH 191** - Single Variable Calculus and Analytic Geometry 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*	←	**PHYS 1A** - Mechanics of Solids (4.00) --- And --- **PHYS 1B** - Fluids, Heat and Sound (3.00)

--- Or ---

CHEM 111A - General Chemistry (5.00)	←	**CHEM 1A** - 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)	←	**BIOL 10** - Fundamentals of Biology (4.00)
BIOL 205 - Human Biology (4.00)	←	**ANATOMY 30** - Essentials of Anatomy and Physiology (4.00)
BIOL 207 - Human Physiology (4.00)	←	**PHYSIOL 31** - Human Physiology (4.00) --- Or --- **A/PHYSIO 34A** - Anatomy and Physiology I (4.00) --- And --- **A/PHYSIO 34B** - Anatomy and Physiology II (4.00) • *Articulates as a sequence only* • *Complete entire sequence at same institution prior to transfer*

END OF AGREEMENT