CERRITOS COLLEGE
COMPUTER SCIENCE
TRANSFER PREPARATION

IMPORTANT NOTICE: The requirements listed for the major are subject to change without notice. It is the student's responsibility to check for the most recent information with a Cerritos College counselor or by consulting ASSIST at www.assist.org. NOTE: Courses listed may require prerequisite coursework.

NOTE: Computer Science is a rapidly changing field. Contact a Cerritos College counselor in order to optimize preparation for transfer.

COMMON LOWER DIVISION PREPARATION FOR CALIFORNIA STATE UNIVERSITY

			UNITS
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4

ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

California State University – Dominguez Hills

CIS	183	JAVA Programming	3
CIS	282	Advanced JAVA Programming	3.5
CIS	231	Computer Organization and Assembly Language Programming	3.5
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4
PHYS	203	Engineering Physics	4

Physics articulation is approved as a sequence only (201+202+203).

NOTE: Students entering the Computer Science program must earn an overall grade point average of 2.0 in courses outside of the department, earn a grade of "C" or better in each course taken within the department and in all **direct** and **indirect** prerequisite courses before advancing to the next level course in a sequence for English, Mathematics, and Science courses. CSUDH also offers a Computer Technology major with options in General, Homeland Security, and Professional track.

California State University – Fullerton

Five tracks: Multimedia & Digital Game Technologies, Internet & Enterprise Computing Technologies, Software Engineering, Scientific Computing, and Customized. (must select one)
A maximum of 6 units of a grade of "D- "(.7) through "D+" (1.3) can count towards the elective track, Mathematics and Science courses only. A "C" average (2.0) and a grade of "C" (1.7) or better is required in all courses applied to the major.

CIS	180	Programming in C/C++	3
CIS	280X	Object-Oriented Programming in C++	3.5
CIS	292	Data Structures	3
CIS	231	Computer Organization and Assembly Language Programming	3.5

Select 1 course from the following:

CIS	183	JAVA Programming	3

CERRITOS COLLEGE
COMPUTER SCIENCE
TRANSFER PREPARATION

California State University – Fullerton (cont.)
Mathematics Requirements (18 units)

CIS	185	Discrete Structures	3

Science and Mathematics Electives (12 units)

BIOL	120	Introduction to Biological Science	4
BIOL	200	Principles of Biology	5
BIOL	201	Principles of Biology	5
CHEM	111	General Chemistry	5
CHEM	112	General Chemistry	5
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4
PHYS	203	Engineering Physics	4
GEOL	101	Physical Geology	4
or GEOL	102	Physical Geology Lecture	(3)
GEOL	102L	Physical Geology Laboratory	(1)
MATH	225	Analytic Geometry and Calculus III	5
MATH	250	Linear Algebra and Differential Equations	5

California State University – Long Beach

CIS	183	JAVA Programming	3
CIS	185	Discrete Structures	3
CIS	292	Data Structures	3
CIS	282	Advanced JAVA Programming	3.5
CIS	280X	Object-Oriented Programming in C++	3.5
ENGR	110	Introduction to Engineering	1

Minimum of 8 units of approved science-electives to include a two-semester science sequence.
Take either:

CHEM	111	General Chemistry	5
or PHYS	201	Engineering Physics	(4)

Remaining units are to be chosen from the following:

BIOL	115	Marine Biology	3
BIOL	120	Introduction to Biological Science	4
A&P	120	Introduction to Human Anatomy and Physiology	4
A&P	151	Introduction to Human Physiology	4
or A&P	201	Human Physiology	(5)

Degree Progress: Transfer students must complete the following requirements within one year of declaring the major: A grade of "C" or better must be achieved in MATH 190 and PHYS 201 within one year after transfer to CSULB (if the equivalent was not taken before transfer).

This CSULB major has "major-specific admission requirements" which means that CSULB will require the specified courses to be completed for admission if a student is not completing an AAT or AST degree deemed "similar" by CSULB. **These criteria will be used for Fall 2021 and Spring 2022 admission consideration. Admission criteria are subject to change for future admission cycles.**

California State University – Long Beach – (cont.)

CERRITOS COLLEGE
COMPUTER SCIENCE
TRANSFER PREPARATION

If a major is highly impacted, it will be noted in the description of each major and additional supplemental criteria and requirements are indicated in the major specific details. See your counselor for more information. Here is the link:
https://www.csulb.edu/admissions/fall-2021-major-specific-requirements-for-transfer-students

California State University – Los Angeles
A grade of "C" or better is required for all prerequisite courses in the major.

CIS	183	JAVA Programming	3
CIS	185	Discrete Structures	3
CIS	292	Data Structures	3
ENGL	155	Technical Writing	3
MATH	250	Linear Algebra and Differential Equations	5
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4

Mathematics Electives (3 units)
Select 3 units of lower division or upper division course(s) in the Mathematics area with prior approval of the Computer Science undergraduate advisor.

This CSULA major has "major-specific admission requirements" which are focused on transfer student preparation that predicts success in the major and promotes timely degree completion. The criteria below reflect the current criteria as well as changes that will be used for the Fall 2021 admission cycle. The criteria listed will be reviewed annually for future admission cycles. For Fall term admission, coursework must be completed no later than the prior Spring term. For Spring term admission, coursework must be completed no later than the prior Summer term. Here is the link:
https://www.calstatela.edu/admissions/major-specific-criteria.

California State Polytechnic University – Pomona

BIOL	120	Introduction to Biological Science	4
CIS	183	JAVA Programming	3
CIS	185	Discrete Structures	3
CIS	231	Computer Organization and Assembly Language Programming	3.5
CIS	282	Advanced JAVA Programming	3.5
CIS	292	Data Structures	3
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4

Due to Major Impaction, Data Structures must be completed with a "C" grade or better no later than the end of the spring term prior to enrollment. Please consult with a counselor to check if articulation has been approved or for other possible options to meet this admissions requirement.
This Cal Poly Pomona major has "impacted major supplemental requirements" which are focused on transfer student preparation that predicts success in the major and promotes timely degree completion. The criteria below reflect the current criteria as well as changes that will be used for the Fall 2021 admission cycle. The criteria listed will be reviewed annually for future admission cycles. For Fall term admission, coursework must be completed no later than the prior Spring term.

CERRITOS COLLEGE
COMPUTER SCIENCE
TRANSFER PREPARATION

California State Polytechnic University – Pomona – (cont.)
For Spring term admission, coursework must be completed no later than the prior Summer term. Here is the link:
https://www.cpp.edu/admissions/transfer/impacted-majors.shtml

COMMON LOWER DIVISION PREPARATION
FOR UNIVERSITY OF CALIFORNIA

			UNITS
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4

If you're starting out at a California community college and know which major you want to study but haven't decided which UC campuses to apply to, you can follow the UC Transfer Pathways to keep your options open as you prepare for your major. These Pathways provide a single set of courses you can take to prepare for your major on any of the nine UC undergraduate campuses. The pathways guide students who want to make themselves competitive across the UC system; some UC campuses may want fewer courses for admission, but none will expect more. Here is the link: http://admission.universityofcalifornia.edu/transfer/preparation-paths/index.html.

University of California – Los Angeles
UCLA offers a B.S. in Computer Science and Computer Science and Engineering majors.

The following courses are REQUIRED for admission to both majors:

CIS	180	Programming in C/C++	3
or CIS	280X	Object-Oriented Programming in C++	(3.5)
ENGL	100	Freshman Composition	4
and ENGL	102	Freshman Composition and Literature	3
or ENGL	103	Critical Argumentative Writing	(3)
or PHIL	103	Philosophical Reasoning: Critical Thinking in Philosophy	(3)
or PSYC	103	Critical Thinking in Psychology	(3)
or COMM	103	Fundamentals of Argumentation and Persuasion	(3)
MATH	225	Analytic Geometry and Calculus III	5
MATH	250	Linear Algebra and Differential Equations	5
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4
PHYS	203	Engineering Physics	4

Students should complete the **entire Physics Series at one community college** (or at community colleges within the same district where courses are exact equivalents).

Additional degree requirements for the major are STRONGLY recommended and may be met with the community college courses for Computer Science and Computer Science and Engineering:

CIS	231	Computer Organization and Assembly Language Programming	3.5
CIS	292	Data Structures	3

CERRITOS COLLEGE
COMPUTER SCIENCE
TRANSFER PREPARATION

University of California – Los Angeles – (cont.)
Computer Science and Computer Science and Engineering are highly competitive. The most important selection criteria are completion of required preparatory courses. A minimum of UC-transferable cumulative GPA of 3.4 is required for consideration. Applicants are not required to complete the HSSEAS General Education Requirements in order to be admitted, although it is beneficial for students to complete 1 course from each of the following areas: arts, humanities, social sciences and life science. Contact a counselor for assistance in selecting these courses.

Effective fall 2013, applicants can fulfill the lower division Breadth and General Education requirements by completion of the Intersegmental General Education Transfer Curriculum (IGETC).

CAREER OPPORTUNITIES:
Computer science graduates are primarily prepared for the area of software design. Graduates usually are recruited by hardware manufacturers and are than involved in the design of vendor supplied software, such as compilers, operating systems, and utility programs

See State University General Education List.

The requirements listed for the major above are subject to change.