

# CERRITOS COLLEGE

## PHYSICS

### 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](http://www.assist.org). **NOTE:** Courses listed may require prerequisite coursework.

#### COMMON LOWER DIVISION PREPARATION FOR CALIFORNIA STATE UNIVERSITY AND UNIVERSITY OF CALIFORNIA

			<b>Units</b>
MATH	170	Analytic Geometry and Calculus I	4
MATH	190	Analytic Geometry and Calculus II	4
MATH	225	Calculus III	5
PHYS	201	Engineering Physics	4
PHYS	202	Engineering Physics	4
PHYS	203	Engineering Physics	4

#### ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

##### California State University – Dominguez Hills (General Physics Option)

CHEM	111	General Chemistry	5
& CHEM	112	General Chemistry	5
CIS	183	JAVA Programming	3

##### (Physical Science Option)

CHEM	111	General Chemistry	5
& CHEM	112	General Chemistry	5
GEOL	101	Physical Geology	4
<b>or</b> GEOL	102	Physical Geology Lecture	(3)
& GEOL	102L	Physical Geology Laboratory	(1)
GEOL	201	Earth History	4
CIS	101	Introduction to Computer Information Systems	3
<b>or</b> CIS	183	JAVA Programming	(3)

##### (Electrical Engineering Option)

CHEM	111	General Chemistry	5
& CHEM	112	General Chemistry	5
CIS	183	JAVA Programming	3

##### California State University – Fullerton

CHEM	111	General Chemistry	5
& CHEM	112	General Chemistry	5

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#### ADDITIONAL LOWER DIVISION MAJOR PREPARATION FOR SPECIFIC TRANSFER INSTITUTIONS

##### California State University – Long Beach (Bachelor of Science in Physics)

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 in the major. **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

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:

[www.csulb.edu/admissions/fall-2020-major-specific-requirements-for-transfer-students](http://www.csulb.edu/admissions/fall-2020-major-specific-requirements-for-transfer-students)

**NOTE:** To be considered for admissions as a Physics (BA) major to CSULB students must complete Math 170 and have an overall CSU transferrable GPA of at least a 2.25. Physics (BS) majors must complete Math 170 and Math 190, and also have a minimum cumulative GPA OF 2.25. For both degrees, in order to be more competitive, students are recommended to complete the additional recommended preparation courses specified.

##### Complete Degree Requirements for B.S. Degree

Students must complete the common lower division preparation for California State University and University of California on the previous page plus courses below.

BIOL	120	Introduction to Biological Science	4
	<i>or</i>		
BIOL	200	Principles of Biology	(5)
<i>and</i> BIOL	201	Principles of Biology	(5)
	<i>or</i>		
CHEM	111	General Chemistry	(5)
MATH	250	Linear Algebra & Differential Equations	5

The complete degree requirements for the B.A. degree include only the common lower division preparation courses.

\*Options in Physics-Material Science and Single Subject Credential-Physics Concentration are available. Please see a counselor for more information on major preparation.

##### California State University – Los Angeles

This CSULA major has “major-specific admission requirements” which are focused on transfer student preparation that predict 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

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2021 admission cycle. The criteria listed will be reviewed annually for future admission cycles. For Fall term admission, coursework must be complete no later than the prior Spring term. For Spring term admission, coursework must be completed no later than the prior Summer term.  
<http://www.calstatela.edu/admissions/major-specific-criteria>

Students must complete the common lower division preparation for California State University and University of California on the previous page plus courses below.

#### **Does not require the completion of Physics 203 for any of their Physics major options**

##### **\*(Bachelor of Arts in Physics)**

CHEM	111	General Chemistry	5
MATH	250	Linear Algebra & Differential Equations	5

##### **\*(Bachelor of Science in Physics)**

CHEM	111	General Chemistry	5
MATH	250	Linear Algebra & Differential Equations	5

\*Options in Astrophysics (Physics, BA) and Biophysics (Physics, BS) are available. Please see a counselor for more information on major preparation.

#### **California State University – Los Angeles (cont.)**

Students will be required to complete a diversity requirement of two courses (six units) certified as diversity courses, at least one focusing on issues of race and ethnicity and their intersectionality with other social categories that structure inequality in society. These courses can be completed either at the lower division or upper division level from among courses satisfying GE requirements. Courses meeting this requirement at Cerritos can be obtained from [www.Assist.org](http://www.Assist.org)

#### **California State University – Pomona Bachelor of Science-General Option**

Students must complete the common lower division preparation for California State University and University of California on the first page plus courses below.

CHEM	111	General Chemistry	5
MATH	250	Linear Algebra & Differential Equations	5

A Biophysics option and an Integrated Science option is available. Please see a counselor for more information on major preparation.

#### **University of California – Irvine**

Students must complete the common lower division preparation for California State University and University of California on the first page plus courses below.

CIS	180	Programming in C/C++	3
<b>or</b> CIS	183	JAVA Programming	(3)

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MATH 250 Linear Algebra & Differential Equations 5

The following courses are required before transfer (to be competitive): **one-year calculus and one year of calculus-based physics with laboratory for engineering and physics major. Transfer students must have a cumulative UC GPA of 3.0 or higher in these courses for admissions consideration.** Concentrations are offered in: Computational Physics, Philosophy of Physics, Physics Education and Astrophysics. See counselor for specific concentration requirements.

#### University of California-Los Angeles

Students must complete the common lower division preparation for California State University and University of California on the first page plus courses below.

(Bachelor of Arts in Physics)

CHEM 111 General Chemistry 5  
MATH 250 Linear Algebra and Differential Equations 5

**NOTE:** The Physics articulation is approved as a sequence (201+202+203)

**At minimum, you must complete one year and one-half years of calculus with analytical geometry through multivariable calculus and one year of calculus-based physics (mechanics, electricity and magnetism) and Linear Algebra.** All preparatory classes must be completed by the spring term prior to transfer. All courses must be taken for a letter grade. It is strongly recommended that the remainder of major preparation be completed prior to transfer.