Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Los Angeles 2022-2023 General Catalog, Semester

From: Mount San Antonio College 2022-2023 General Catalog, Semester

Computer Science - B.S.

ADMISSIONS CRITERIA FOR MAJOR

Major Specific Criteria for Transfer Admission

GENERAL INFORMATION FOR ALL TRANSFER STUDENTS

<u>Cal State LA</u> <u>General Education Lower Division Courses</u>

<u>Cal State Apply</u> <u>Department of Computer Science</u>

<u>Degree with a Guarantee</u> <u>ECST Academic Advising</u>

University Catalog College of Engineering, Computer Science, and Technol

COMPUTER SCIENCE - BS

The objective of the Bachelor of Science degree in Computer Science is to prepare qualified students for careers involving the design of computer systems and their applications to science and industry. The program provides an excellent foundation in all core areas of computer science with the opportunity to choose electives in a variety of specialized fields.

Requirements for the Major

- The total number of units required for the Bachelor of Science degree in Computer Science is 120 units, of which 93 units are in the major.
- Computer Science students are required to take 48 units of <u>General Education (GE)</u> of which 21 units are met by courses in the major. Consult with an advisor in the department for the specific number of units required in all areas of the degree, including GE and free electives.

LOWER DIVISION GENERAL EDUCATION REQUIREMENTS

Lower Division General Education Requirements (39 units)

Block A - English Language Communication and Critical Thinking Courses (9 units):

- A1 Oral Communication (3)
- A2 Written Communication (3) Must take <u>ENGL 1010</u> (3)
- A3 Critical Thinking and Composition (3)
 - Critical Thinking Met by <u>CS 2011</u> (4), <u>CS 3801</u> (3), <u>CS 3337</u> (3), <u>CS 3186</u> (3), <u>CS 4961</u> (3), and <u>CS 4962</u> (3)
 - 2nd Composition Met by Met by <u>ENGL 2030</u> (3)

Block B - Natural Science and Math/Quantitative Reasoning Courses (9 units):

- B1 Physical Science (3) Met by PHYS 2100 (5)
- B2 or B3 Biological science (3) or Interdisciplinary Science (3)
- B4 Quantitative Reasoning and Mathematical Concepts (3) Met by MATH 2110 (4)

Block C - Arts and Humanities Courses (9 units):

- American Institutions US History (3)
- C1 Arts (3)
- C2 Humanities (3) Met by <u>CS 3801</u> (3)

Block D - Social Science Courses (9 units):

- American Institutions US Constitution and State/Local Govt. (3)
- Social Science (6 units)

Block E - Lifelong Understanding and Self-Development Courses (3 units):

• Met by CS 1010 (3), also satisfied LD (cl) and IHE

The articulation information in Assist.org not only shows a link to the admission requirements (aka our <u>Major Specific Criteria</u> webpage) but also Cal State LA graduation requirements that may be completed at the lower-division level, prior to transferring to the University. The diversity requirement is a **graduation requirement**, not an admission requirement. The diversity requirement may be completed prior to, or after, transferring to the University.

For the Cal State LA degree, students will be required to complete **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.

Please see the **Requirement Information** sections below for the lower-division courses that will meet the Diversity and Race & Ethnicity Requirements.

LOWER DIVISION REQUIRED COURSES				
Minimum grade required: C or better				
CS 1222 - Introduction to Relational Databases (3.00)	←	No Course Articulated		
CS 2011 - Introduction to Programming I (3.00)	\leftarrow	CSCI 110 - Fundamentals of Computer Science (3.50)		
CS 2012 - Introduction to Programming II (3.00)	←	CSCI 145 - JAVA Language and Object Oriented Programming (4.00)		
		Or CSCI 140 - C++ Language and Object Development (4.00)		
CS 2013 - Programming with Data Structures (3.00)	\leftarrow	CSCI 240 - Data Structures and Algorithms (5.00)		
CS 2148 - Discrete Structures (3.00)	\leftarrow	CSCI 190 - Discrete Mathematics Applied to Computer Science (4.00)		
CS 2445 - Introduction to Computer Systems (3.00)	\leftarrow	CSCI 150 - Assembly Language/Machine Architecture (3.50)		
CS 2470 - Fundamentals of Network Systems and Cybersecurity (3.00)	←	No Course Articulated		
ENGL 2030 - Introduction to Technical Writing (3.00)	\leftarrow	ENGR 1C - Engineering Critical Thinking (3.00)		
MATH 2110 - Calculus I (4.00)	\leftarrow	MATH 180 - Calculus and Analytic Geometry (4.00)		
MATH 2120 - Calculus II (4.00)	\leftarrow	MATH 181 - Calculus and Analytic Geometry (4.00)		
MATH 2550 - Introduction to Linear Algebra (3.00)	\leftarrow	MATH 285 - Linear Algebra and Differential Equations (5.00)		
		Or		

PHYS 2100 - General Physics I: Mechanics (5.00)

MATH 260 - Linear Algebra (3.00)

PHYS 4A - Engineering Physics (5.00)

DIVERSITY COURSES FOR CAL STATE LA GRADUATION REQUIREMENT				
REFER TO TOP OF AGREEMENT				
AAAS 1600 - History of Asia (3.00) Same-As: HIST 1600	←	No Course Articulated		
AAAS 1700 - Understanding Contemporary Asia (3.00)	\leftarrow	No Course Articulated		
AAAS 2000 - Pacific Asian Culture, People, & Society (3.00)	\leftarrow	No Course Articulated		
ANTH 1001 - Where in the World of Education at CSULA are You? (3.00)	←	No Course Articulated		
ANTH 1500 - Introduction to Cultural Anthropology (3.00)	←	ANTH 5 - Cultural Anthropology (3.00) Or		
		ANTH 5H - Cultural Anthropology - Honors (3.00)		
ANTH 2700 - Great Archaeological Discoveries of the Past (3.00)	\leftarrow	ANTH 3 - Archaeology (3.00)		
ART 2090 - Perspectives on Art and Cultural Diversity (3.00)	\leftarrow	No Course Articulated		
ART 2400 - Art and Life Perspectives (3.00)	\leftarrow	No Course Articulated		
BUS 2500 - Diversity, Business and the Workplace (3.00)	\leftarrow	No Course Articulated		
CHDV 1200 - Intimate Relationships in our Diverse Society (3.00)	\leftarrow	SOC 14 - Marriage and the Family (3.00)		
Same-As: SOC 1200		Or		
		SOC 14H - Marriage and the Family - Honors (3.00)		
CHDV 2250 - Ethnic Identity and Awareness in Children and Families (3.00)	←	CHLD 50 - Teaching in a Diverse Society (3.00)		
CLS 2200 - Chicanas and Latinas in Contemporary U.S. Society (3.00) Same-As: WGSS 2200	←	HIST 40 - History of the Mexican American (3.00)		
COMM 2500 - Communication, Identity and Culture (3.00)	\leftarrow	No Course Articulated		
COUN 2020 - Integration of Adults with Disabilities in the U.S. Society (3.00)	←	No Course Articulated		

COUN 2250 - Diversity and Awareness of Self and Others for Helping Professionals (3.00)	←	No Course Articulated
ENGL 2600 - Literary Los Angeles (3.00)	\leftarrow	No Course Articulated
GEOG 1550 - Cultural Geography (3.00)	\leftarrow	GEOG 2 - Human Geography (3.00)
		Or GEOG 2H - Human Geography - Honors (3.00)
HIST 1010 - World History to 1500 CE (3.00)	←	HIST 3 - World History: Prehistoric to Early Modern (3.00)
HIST 1020 - World History since 1500 CE (3.00)	\leftarrow	HIST 4 - World History: Early Modern to the Present (3.00)
HIST 1600 - History of Asia (3.00) Same-As: AAAS 1600	←	No Course Articulated
HIST 2010 - Early American History (3.00)	←	HIST 7 - History of the United States to 1877 (3.00)
HIST 2020 - Recent United States History (3.00)	\leftarrow	HIST 8 - History of the United States from 1865 (3.00)
HNRS 2210 - Reading Los Angeles: Engaging Cultural Expressions in a Global City (3.00)	←	No Course Articulated
LAS 1500 - Introduction to Latin American Studies (3.00)	\leftarrow	No Course Articulated
LAS 2550 - Diverse Latin American Populations in Southern California (3.00) Same-As: CLS 2040	←	No Course Articulated
LBS 2400 - Introduction to Environmental Humanities (3.00)	\leftarrow	No Course Articulated
LBS 2500 - Social Change and Social Movements in the U.S. (3.00)	\leftarrow	No Course Articulated
LBS 2666 - Science Fiction Film and Television (3.00) Same-As: TVF 2666	←	No Course Articulated
PHIL 2000 - Introduction to Comparative Religions (3.00) Same-As: RELS 2000	←	No Course Articulated
PHIL 2200 - Contemporary Moral and Social Issues: An Intersectional Approach (3.00)	←	No Course Articulated
HNRS 2210 - Reading Los Angeles: Engaging Cultural Expressions in a Global City (3.00)	←	No Course Articulated
PHIL 2300 - Meanings of Human Life: An Intersectional Approach (3.00)	←	No Course Articulated
PHIL 2400 - Philosophy of Film (3.00)	\leftarrow	No Course Articulated
RELS 2000 - Introduction to Comparative Religions (3.00) Same-As: PHIL 2000	←	No Course Articulated
SOC 1001 - Individual Development in Diverse Contexts (3.00) • Minimum grade required: C or better	←	No Course Articulated
SOC 1200 - Intimate Relationships in Our Diverse Society (3.00) Same-As: CHDV 1200	←	SOC 14 - Marriage and the Family (3.00) Or SOC 14H - Marriage and the Family - Honors (3.00)
SOC 2010 - Introduction to Sociology (3.00)	←	SOC 1 - Introduction to Sociology (3.00) Or SOC 1H - Introduction to Sociology - Honors (3.00)
TVF 1938 - History of Comic Books (3.00)	←	No Course Articulated
TVF 2500 - Media, Culture and Identity (3.00)	\leftarrow	JOUR 107 - Race, Culture, Gender, and Mass Media Images (3.00)
TVF 2666 - Science Fiction Film and Television (3.00) Same-As: LBS 2666	←	No Course Articulated
WGSS 1010 - Gender and Sexuality in College (3.00)	\leftarrow	No Course Articulated
WGSS 2000 - Introduction to Women's, Gender, and Sexuality Studies (3.00)	\leftarrow	No Course Articulated

RACE & ETHNICITY COURSES FOR CAL STATE LA GRADUATION REQUIREMENT

REFER TO TOP OF AGREEMENT		
AAAS 1400 - Introduction to Globalization, Race and Place (3.00) Same-As: PAS 1400, LAS 1400	\leftarrow	No Course Articulated
AAAS 1500 - Asian-American History (3.00) Same-As: HIST 1500	\leftarrow	No Course Articulated
AAAS 2100 - Asian America: Culture, History, and Community (3.00)	\leftarrow	No Course Articulated

AAAS 2200 - Asia and Asian American in Literature, Arts, and Media (3.00)	←	No Course Articulated
AAAS 2630 - Asian-American Experience (3.00)	\leftarrow	No Course Articulated
CLS 1200 - Chicanas/os Latinas/os, Gender, and Class in the US Experience (3.00)	←	No Course Articulated
CLS 1300 - The Constitution, Equity and Chicanas/os and Latinas/os (3.00)	←	POLI 25 - Latino Politics in the United States (3.00) Same-As: LCAS 25
CLS 1500 - Cultural Diversity, Chicanas/os, and Latinas/os (3.00)	\leftarrow	No Course Articulated
CLS 1600 - Cultural Expressions in the Americas (3.00)	\leftarrow	No Course Articulated
CLS 2010 - Modern Mexican Literature in Translation (3.00)	←	LIT 25 - Contemporary Mexican American Literature (3.00)
CLS 2050 - Chicanas/os and Latinas/os in Film and Popular Culture (3.00)	←	No Course Articulated
CLS 2060 - Latina/o Images in Media, Social Media, and Digital Communication Systems (3.00)	←	No Course Articulated
CLS 2100 - Chicana/o and Latino/a Political and Social Movements (3.00)	←	No Course Articulated
CLS 2300 - Family Structure in the Americas (3.00)	\leftarrow	No Course Articulated
ENGL 2665 - Race and Ethnicity in Science Fiction (3.00) Same-As: LBS 2665	←	No Course Articulated
HIST 1500 - Asian-American History (3.00) Same-As: AAAS 1500	←	No Course Articulated
HIST 2050 - Race and Ethnicity in United States History (3.00)	\leftarrow	No Course Articulated
LAS 1020 - The African Diaspora in the Americas (3.00) Same-As: PAS 1020	←	No Course Articulated
LAS 1400 - Introduction to Globalization, Race and Place (3.00) Same-As: PAS 1400, AAAS 1400	←	No Course Articulated
LBS 2340 - Multicultural Arts, L.A. (3.00)	\leftarrow	No Course Articulated
LBS 2665 - Multicultural Science Fiction (3.00) Same-As: ENGL 2665	←	No Course Articulated
PAS 1020 - The African Diaspora in the Americas (3.00) Same-As: LAS 1020	←	No Course Articulated
PAS 1100 - Racial Equality, Government and the Constitution (3.00)	←	No Course Articulated
PAS 1200 - Elementary African Language and Culture (3.00)	\leftarrow	No Course Articulated
PAS 1400 - Introduction to Globalization, Race and Place (3.00) Same-As: LAS 1400, AAAS 1400	←	No Course Articulated
PAS 1500 - Black Oral Traditions and Communication (3.00)	\leftarrow	No Course Articulated
PAS 1510 - African American History (3.00)	\leftarrow	HIST 30 - History of the African American 1619-1877 (3.00)
PAS 1800 - Critical Race Theory (3.00)	←	No Course Articulated
PAS 2010 - Third World Literature (3.00)	←	No Course Articulated
PAS 2020 - African American Religion as Civic Culture (3.00)	←	No Course Articulated
PAS 2210 - African American Music as History and Criticism (3.00)	←	No Course Articulated
PAS 2500 - African History (3.00)	←	HIST 35 - History of Africa (3.00)
PAS 2600 - Third World Images in Film (3.00)		No Course Articulated
PHIL 2230 - Diversity and Justice (3.00)	←	No Course Articulated
SOC 2630 - Asian-American Experience (3.00)		SOC 36 - Asian American Communities (3.00)
SPAN 2420 - Hispanic Societies through Literature (3.00)		No Course Articulated
WGSS 2030 - Gender and Race in the United States (3.00)		No Course Articulated
WGSS 2200 - Chicanas and Latinas in Contemporary U.S. Society (3.00) Same-As: CLS 2200	<u></u>	HIST 40 - History of the Mexican American (3.00)
WGSS 2300 - Gender, Sexuality, and American Indian Communities (3.00)	←	No Course Articulated

