

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Los Angeles
2022-2023 General Catalog, Quarter

From: Pasadena City College
2022-2023 General Catalog, Semester

Computer Science/B.S.

IMPORTANT MAJOR DETAILS

Admission to the Henry Samueli School of Engineering and Applied Sciences at UCLA is highly competitive. **The most important selection criteria are completion of the required preparatory courses and academic performance.** Listed below are the lower division preparation courses for the major. All applicants must have a minimum transferable cumulative GPA of 3.4. Preparatory courses must be completed by the end of spring prior to fall enrollment. All major courses must be taken for a letter grade. HSSEAS admits students by major and does NOT consider applicants for alternate majors.

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 sciences. Applicants can fulfill the lower division General Education requirement by completion of the Intersegmental General Education Transfer Curriculum (IGETC). **Partial IGETC is NOT accepted.** For more information regarding this major and UCLA's transfer selection process, visit www.admission.ucla.edu. If you still have specific questions, you may email the HSSEAS admissions office at erkki@seas.ucla.edu.

PLEASE NOTE: The community college courses listed on this major agreement have been approved as substitutes to satisfy the admission preparation requirements for this major, but they may not be exact equivalents of the UCLA courses listed. In addition, upper division requirements for the major may be satisfied by lower division community college course(s) listed below, however, credit will be determined by the department after transfer.

PROGRAMMING REQUIREMENT

C++ is the Preferred language for this major, however (Java, & C) are also acceptable programming courses.

NOTE: A course equivalent to UCLA's CS 31 is acceptable to meet the programming requirement for this major.

LOWER DIVISION MAJOR REQUIREMENTS

MATH 31A - Differential and Integral Calculus (4.00)	←	MATH 005A - Single Variable Calculus I (5.00) --- Or --- MATH 005AH - Honors Single Variable Calculus I (5.00)
MATH 31B - Integration and Infinite Series (4.00)	←	MATH 005B - Single Variable Calculus II (5.00) --- Or --- MATH 005BH - Honors Single Variable Calculus II (5.00)
MATH 32A - Calculus of Several Variables (4.00)	←	MATH 005C - Multivariable Calculus (5.00)
MATH 32B - Calculus of Several Variables (4.00)	←	MATH 005C - Multivariable Calculus (5.00)
MATH 33A - Linear Algebra and Applications (4.00)	←	MATH 010 - Linear Algebra and Applications (4.00) --- Or --- MATH 010H - Honors Linear Algebra and Applications (4.00)
MATH 33B - Differential Equations (4.00)	←	MATH 055 - Differential Equations (4.00) --- Or --- MATH 055H - Honors Differential Equations (4.00)

PHYSICS 1A+ 1B+1C+ 4AL or 4BL



PHYS 001A - Physics for Scientists and Engineers I: Mechanics (5.00)

--- And ---

PHYS 001B - General Physics (5.00)

--- And ---

PHYS 001C - General Physics (5.00)

--- Or ---

PHYS 008A - Physics for Scientists and Engineers I: Mechanics (5.00)

--- And ---

PHYS 008B - Physics for Scientists and Engineers II: Waves, Electricity & Magnetism (5.00)

--- And ---

PHYS 008C - Physics for Scientists and Engineers III: Thermodynamics, Optics, and Modern Physics (5.00)

ENGCOMP 3 - English Composition, Rhetoric, and Language (5.00)



ENGL 001A - Reading and Composition (4.00)

--- Or ---

ENGL 001AH - Honors Reading and Composition (4.00)

--- And ---

Select 1 Course(s) from the following

One additional course in English composition



ENGL 001B - Reading and Composition (4.00)

--- Or ---

ENGL 001BH - Honors Reading and Composition (4.00)

--- Or ---

ENGL 001C - Intermediate Composition - Critical Thinking and Argument (4.00)

--- Or ---

ENGL 001CH - Honors Intermediate Composition-Critical Thinking and Argument (4.00)

--- Or ---

PHIL 025 - Introduction to Critical Thinking (3.00)

--- Or ---

PHIL 025H - Honors Critical Thinking (3.00)

--- Or ---

PHSC 002 - Scientific Method as Critical Thinking (3.00)

--- And ---

Select 1 Course(s) from the following

One course in computer programming: C++ preferred



CS 002 - Fundamentals of Computer Science I (4.00)

--- Or ---

CS 003A - Fundamentals of Computer Science II (C++) (4.00)

--- Or ---

CIS 014 - C++ Programming (3.00)

STRONGLY RECOMMENDED COURSES

COM SCI 31 - Introduction to Computer Science I (4.00)	←	CS 002 - Fundamentals of Computer Science I (4.00)
		--- Or ---
		CS 003A - Fundamentals of Computer Science II (C++) (4.00)
		--- Or ---
		CIS 014 - C++ Programming (3.00)
		--- And ---
		CS 002 - Fundamentals of Computer Science I (4.00)
COM SCI 32 - Introduction to Computer Science II (4.00)	←	CS 008 - Fundamentals of Computer Science III-Data Structures (4.00)
COM SCI 33 - Introduction to Computer Organization (5.00)	←	No Course Articulated
COM SCI M51A - Logic Design of Digital Systems (4.00)	←	CS 006 - Introduction to Applied Logic Design (4.00)
MATH 61 - Introduction to Discrete Structures (4.00)	←	MATH 022 - Discrete Mathematics (4.00)

END OF AGREEMENT