

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: American River 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 400** - Calculus I (5.00)

MATH 31B - Integration and Infinite Series (4.00)

← **MATH 401** - Calculus II (5.00)

MATH 32A - Calculus of Several Variables (4.00)

← **MATH 402** - Calculus III (5.00)

MATH 32B - Calculus of Several Variables (4.00)

← **MATH 402** - Calculus III (5.00)

MATH 33A - Linear Algebra and Applications (4.00)

← **MATH 410** - Introduction to Linear Algebra (3.00)

MATH 33B - Differential Equations (4.00)

← **MATH 420** - Differential Equations (4.00)

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

←

PHYS 410 - Mechanics of Solids and Fluids (5.00)

--- And ---

PHYS 421 - Electricity and Magnetism (4.00)

--- And ---

PHYS 431 - Heat, Waves, Light and Modern Physics (4.00)

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

←

ENGWR 300 - College Composition (3.00)

--- Or ---

ENGWR 480 - Honors College Composition (3.00)

--- And ---

Select 1 Course(s) from the following

One additional course in English composition

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ENGWR 301 - College Composition and Literature (3.00)

--- Or ---

ENGWR 302 - Advanced Composition and Critical Thinking (3.00)

--- Or ---

ENGWR 481 - Honors College Composition and Literature (3.00)

--- Or ---

ENGWR 482 - Honors Advanced Composition and Critical Thinking (3.00)

--- And ---

Select 1 Course(s) from the following

One course in computer programming: C++ preferred



CISP 400 - Object Oriented Programming with C++ (4.00)

STRONGLY RECOMMENDED COURSES

COM SCI 31 - Introduction to Computer Science I (4.00)



CISP 360 - Introduction to Structured Programming (4.00)

--- Or ---

CISP 480 - Honors Introduction to Structured Programming (5.00)

--- Or ---

CISP 400 - Object Oriented Programming with C++ (4.00)

COM SCI 32 - Introduction to Computer Science II (4.00)



No Course Articulated

COM SCI 33 - Introduction to Computer Organization (5.00)



CISP 310 - Assembly Language Programming for Microcomputers (4.00)

COM SCI M51A - Logic Design of Digital Systems (4.00)



No Course Articulated

MATH 61 - Introduction to Discrete Structures (4.00)



CISP 440 - Discrete Structures for Computer Science (3.00)

END OF AGREEMENT