# **Articulation Agreement by Major**

Effective during the 2022-2023 Academic Year

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

From: Orange Coast 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 <u>substitutes</u> to satisfy the <u>admission preparation</u> <u>requirements</u> 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)	<b>←</b>	MATH A180 - Calculus 1 (4.00) Or
		MATH A180H - Honors Calculus 1 (4.00)
		Or
		MATH A182H - Honors Calculus 1 and 2 (5.00)
MATH 31B - Integration and Infinite Series (4.00)	←	MATH A182H - Honors Calculus 1 and 2 (5.00)
		Or
		MATH A185 - Calculus 2 (4.00) Or
		Or MATH A185H - Honors Calculus 2 (4.00)
MATH 32A - Calculus of Several Variables (4.00)		
		MATH A280 - Calculus 3 (4.00) Or
		MATH A280H - Honors Calculus 3 (5.00)
MATH 32B - Calculus of Several Variables (4.00)	<b>←</b>	MATH A280 - Calculus 3 (4.00)
		Or
		MATH A280H - Honors Calculus 3 (5.00)
MATH 33A - Linear Algebra and Applications (4.00)	←	<b>MATH A285</b> - Introduction to Linear Algebra and Differential Equations (4.00)
		Or
		<b>MATH A285H</b> - Honors Introduction to Linear Algebra and Differential Equations (5.00)
MATH 33B - Differential Equations (4.00)	<b>←</b>	<b>MATH A285</b> - Introduction to Linear Algebra and Differential Equations (4.00)
		Or
		MATH A285H - Honors Introduction to Linear Algebra and
		Differential Equations (5.00)

PHYSICS 1A+ 1B+1C+ 4AL or 4BL	PHYS A185 - Calculus-Based Physics: Mechanics (4.00)  And PHYS A280 - Calculus-Based Physics: Electricity/Magnetism (4.00)  And PHYS A285 - Calculus-Based Physics: Modern (4.00)			
ENGCOMP 3 - English Composition, Rhetoric, and Language (5.00	0) ENGL A100 - Freshman Composition (3.00)  Or  ESL A100 - ESL College Composition (3.00)			
And				
	se(s) from the following			
One additional course in English composition	ENGL A101 - Critical Reasoning: Fiction (4.00)  Or  ENGL A101H - Critical Reasoning: Fiction Honors (4.00)  Or  ENGL A102 - Critical Reasoning: Nonfiction (3.00)  Or  ENGL A102H - Critical Reasoning: Nonfiction Honors (3.00)  Or  PHIL A150 - Critical Reasoning and Writing (3.00)			
And				
Select 1 Course(s) from the following				
One course in computer programming: C++ preferred	← CS A250 - C++ Programming Language 2 (4.00)			

# STRONGLY RECOMMENDED COURSES

COM SCI 31 - Introduction to Computer Science I (4.00)	$\leftarrow$	CS A150 - C++ Programming Language 1 (4.00)
COM SCI 32 - Introduction to Computer Science II (4.00)	$\leftarrow$	CS A200 - Data Structures (4.00)
COM SCI 33 - Introduction to Computer Organization (5.00)	$\leftarrow$	No Course Articulated
COM SCI M51A - Logic Design of Digital Systems (4.00)	$\leftarrow$	No Course Articulated
MATH 61 - Introduction to Discrete Structures (4.00)	$\leftarrow$	MATH A230 - Introduction to Discrete Mathematics (5.00)

# **END OF AGREEMENT**