

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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

From: Ventura 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](http://www.admission.ucla.edu). If you still have specific questions, you may email the HSSEAS admissions office at [erkki@seas.ucla.edu](mailto: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 V21A** - Calculus with Analytic Geometry I (5.00)

**MATH 31B** - Integration and Infinite Series (4.00)

← **MATH V21B** - Calculus with Analytic Geometry II (5.00)

**MATH 32A** - Calculus of Several Variables (4.00)

← **MATH V21C** - Multivariable Calculus (5.00)

**MATH 32B** - Calculus of Several Variables (4.00)

← **MATH V21C** - Multivariable Calculus (5.00)

**MATH 33A** - Linear Algebra and Applications (4.00)

← **MATH V22** - Introduction to Linear Algebra (3.00)

**MATH 33B** - Differential Equations (4.00)

← **MATH V23** - Introduction to Differential Equations (3.00)

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

←

**PHYS V04** - Mechanics for Scientists and Engineers (4.00)

--- And ---

**PHYS V05** - Electricity and Magnetism for Scientists and Engineers (4.00)

--- And ---

**PHYS V06** - Optics, Heat, and Modern Physics for Scientists and Engineers (4.00)

--- And ---

**PHYS V04L** - Mechanics Laboratory for Scientists and Engineers (1.00)

--- And ---

**PHYS V05L** - Electricity and Magnetism Laboratory for Scientists and Engineers (1.00)

--- And ---

**PHYS V06L** - Optics, Heat and Modern Physics Laboratory for Scientists and Engineers (1.00)

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

←

**ENGL V01A** - English Composition (4.00)

--- And ---

Select 1 Course(s) from the following

One additional course in English composition



**PHIL V05** - Critical Thinking and Analytic Writing (3.00)

--- Or ---

**ENGL V01B** - Critical Thinking and Composition Through Literature (4.00)

--- Or ---

**ENGL V01C** - Advanced Composition and Critical Thinking (3.00)

--- And ---

Select 1 Course(s) from the following

One course in computer programming: C++ preferred



**CS V13** - Object-Oriented Programming (3.00)

--- Or ---

**CS V30** - Beginning C++ (3.00)

### STRONGLY RECOMMENDED COURSES

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



**CS V30** - Beginning C++ (3.00)

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



No Course Articulated

**COM SCI 33** - Introduction to Computer Organization (5.00)



No Course Articulated

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



No Course Articulated

**MATH 61** - Introduction to Discrete Structures (4.00)



**CS V17** - Discrete Structures (3.00)

Same-As: MATH V52

--- And ---

**MATH V52** - Discrete Structures (3.00)

Same-As: CS V17

END OF AGREEMENT