



# Transfer Requirements

**UCLA ENGINEERING**  
 Henry Samueli School of  
 Engineering and Applied Science  
*Birthplace of the Internet*

	Aerospace Engineering	Bioengineering	Chemical Engineering	Civil Engineering	Computer Engineering	Computer Science	Computer Science & Engineering	Electrical Engineering	Materials Engineering	Mechanical Engineering	
<b>MATH</b>	MATH 5A (Single Variable Calculus I)	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>MAJOR PREP REQUIREMENTS</b>
	MATH 5B (Single Variable Calculus II)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 5C (Multivariable Calculus)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 10 (Linear Algebra and Applications)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 55 (Differential Equations)	◆	✓	✓	✓	✓	✓	✓	✓	◆	
<b>CHEMISTRY</b>	CHEM 1A (General Chemistry and Chemical Analysis)	✓	✓	✓	✓			✓	✓	✓	
	CHEM 1B (General Chemistry and Chemical Analysis)	✓	✓	✓	✓				✓	✓	
	CHEM 8A (Organic Chemistry)		✓	✓							
	CHEM 8B (Organic Chemistry)		✓	✓							
<b>PHYSICS</b>	PHYS 1A (General Physics)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	PHYS 1B (General Physics)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	PHYS 1C (General Physics)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>PROGRAMMING (choose one)</b>	MATLAB Programming (no course at Pasadena CC)	★	★	★	★				★	★	
	CS 2 (Fundamentals of Computer Science I)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CIS 14 (C++ Progr.) or CS 3A (Fundamentals of Com Sci II - C++)	✓	✓	✓	✓	★	★	★	★	✓	
	CS 3B (Fundamentals of Computer Science II - Java)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CIS 16 (Java Programming)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Writing/ GE</b>	ENGL 1A (Reading and Composition)	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>TRANSFER REQUIREMENTS</b>
	ENGL 1B or 1C or PHIL 25 or PHSC 2 (choose one)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	General Education (Social Sciences, Arts, or Humanities)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>OTHER</b>	MATH 22 (Discrete Mathematics)					◆	◆	◆			<b>OPTIONAL</b>
	CS 6 (Introduction to Applied Logic Design)					◆	◆	◆	◆		
	CS 8 (Fundamentals of Computer Science III - Data Structures)					◆	◆	◆	◆		
	CS 66 (Assembly Language Programming)					◆	◆	◆			
	BIOL 10A (Cellular Biology, Genetics & Evolution)		◆								
	BIOL 10B (Diversity of Life on Earth: Structure, Function and Ecology)		◆								
	BIOL 10C (Genetics)		◆								
	ENGR 2 (Engineering Graphics)									◆	
ENGR 16 (Engineering Circuits)					◆		◆	◆			

- ★ - strongly preferred (EE, CE, CS and CS&E applicants who complete this have higher priority over those who haven't)
- ◆ - recommended (will not affect your chances of admission, so only take these courses if you have finished all required major prep courses)

Applicants must have a minimum of 60 semester units in addition to completing the required major prep. California Community College students should check [assist.org](http://assist.org) for specific transfer requirements.

Admission is highly competitive. Applicants must have a minimum 3.4 cumulative GPA to be considered. Competitive applicants have major prep GPAs of 3.8 or higher.