



# 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 7 (Calculus 1)	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>MAJOR PREP REQUIREMENTS</b>
	MATH 8 (Calculus 2)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 11 (Multivariable Calculus)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 13 (Linear Algebra)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	MATH 15 (Differential Equations)		✓	✓	✓	✓	✓	✓	✓	✓	
<b>CHEMISTRY</b>	CHEM 11 (General Chemistry I)	✓	✓	✓	✓			✓	✓	✓	
	CHEM 12 (General Chemistry II)	✓	✓	✓	✓				✓	✓	
	CHEM 21 (Organic Chemistry I)		✓	✓							
	CHEM 22 (Organic Chemistry II)		✓	✓							
<b>PHYSICS</b>	PHYSICS 21 (Mechanics with Lab)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	PHYSICS 22 (Electricity and Magnetism with Lab)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	PHYSICS 23 (Fluids, Waves, Thermodynamics, Optics with Lab)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>PROGRAMMING (choose one)</b>	CS 30 (MATLAB Programming)	★	★	★	★				★	★	
	CS 50 (C Programming)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CS 52 (C++ Programming)	✓	✓	✓	✓	★	★	★	✓	✓	
	CS 55 (Java Programming)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	CS 56 (Advanced Java Programming)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>Writing/ GE</b>	ENGL 1 (Reading and Composition)	✓	✓	✓	✓	✓	✓	✓	✓	✓	<b>TRANSFER REQUIREMENTS</b>
	ENGL 2 or ENGL 31 (choose one)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	General Education (Social Sciences, Arts, or Humanities)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<b>OTHER</b>	CS 10 or MATH 10 (Discrete Structures)					◆	◆	◆			<b>OPTIONAL</b>
	CS 17 (Assembly Language Programming)					◆	◆	◆			
	CS 20A (Data Structures with C++)					◆	◆	◆	◆		
	CS 42 (Computer Architecture)					◆	◆	◆	◆		
	BIOL 21 (Cell Biology and Evolution)		◆								
	BIOL 22 (Genetics and Molecular Biology)		◆								
	BIOL 23 (Organismal and Environmental Biology)		◆								
ENGR 11 (Engineering Graphics and Design)									◆		

★ - 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 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.