



El Camino College
PRE-ENGINEERING MAJOR
UCLA SCHOOL OF ENGINEERING AND APPLIED SCIENCES

IGETC IS NOT RECOMMENDED FOR ENGINEERING MAJORS

The UCLA Samueli School of Engineering (HSSEAS) admits transfer students for the fall. Admission is very competitive. The **most important considerations for transfer admission** are completion of the required major preparatory courses and grade point average (GPA). Transfer applicants must have a minimum UC transferable GPA of at least 3.40 in order to be considered. In determining admission to the Engineering program, UCLA weighs the grades from math and science courses (especially Math & Physics) more heavily than grades from GE courses.

The range of GPA of students admitted to HSSEAS are:

- Aerospace Engineering: 3.77 – 3.98
- Bioengineering: 3.77 – 3.93
- Chemical Engineering: 3.68 – 3.97
- Civil Engineering: 3.85 – 4.00
- Computer Science & Engineering: 3.94 – 4.00
- Computer Science: 3.94 – 4.00
- Computer Engineering: 3.91 – 4.00
- Electrical Engineering: 3.83 – 4.00
- Mechanical Engineering: 3.85 – 4.00
- Materials Engineering: 3.82 – 4.00

Please note that students who have received permission from ECC or from another institution to repeat a course in which a grade of "C" or higher had been earned, UCLA will only use the original grade for transfer. If you earn a grade below a "C" in a major prep course and you repeat it, both the original grade and the new grade will be calculated into the major prep GPA.

Students should concentrate on completing major preparation and meet minimum eligibility requirements (60 units to include the seven-course breadth and major requirements) for admission to UCLA. They do not require applicants to have completed the general education requirements in order to be admitted, although it is to the student's benefit to have completed 3 to 4 general education electives. Please see the reverse side of this sheet for a list of acceptable general education courses. HSSEAS will accept the full IGETC certification, but it is not required nor will it affect your chances of being admitted

Identify the acronym of the engineering major from the list to identify courses needed for your major.

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|---------------------------------|--|-----------------------|
| AE: Aerospace | CE: Computer Engineering | EE: Electrical |
| BIO: Bioengineering | CSCI: Computer Science | MA: Materials |
| CHEM: Chemical | CSE: Computer Science and Engineering | ME: Mechanical |
| CIVIL: Civil Engineering | | |

REQUIRED MAJOR PREPARATION FOR ADMISSION:

English

All majors ENGL 1A **and** 1B or 1C or PHIL 105 or PSYCH 103

Mathematics

All majors

MATH 190, 191, 220, 270; (210 highly recommended- CSCI/CSE)

Physics

All majors

PHYS 1A, 1C, 1D

Chemistry

BIO, CHEM

CEHM 1A-1B, CHEM 7A (CHEM 7B recommended)

AE, CIVIL, MA, ME

CHEM 1A-1B

EE

CHEM 1A

Biology

BIO

Strongly Recommended BIOL 110 and BIOL 120

Computer Science

AE, BIO, CIVIL, CHEM, MA, ME

CSCI 17 preferred (CSCI 1 or CSCI 30 or CSCI 2 and 3)

EE

CSCI 1 required, CSCI 2 recommended

CSCI, CSE, CE

CSCI 1 required, CSCI 2 recommended

Major Requirement	AE	BIO	CHEM	CIVIL	CSCI	CE	CSE	EE	MA	ME
ENGL 1A	X	X	X	X	X	X	X	X	X	X
ENGL 1B or ENGL 1C or PHIL 105 or PSYC 103	X	X	X	X	X	X	X	X	X	X
MATH 190	X	X	X	X	X	X	X	X	X	X
MATH 191	X	X	X	X	X	X	X	X	X	X
MATH 220	X	X	X	X	X	X	X	X	X	X
MATH 270	X	X	X	X	X	X	X	X	X	X
MATH 210 (recommended)					X	X	X			
PHYS 1A	X	X	X	X	X	X	X	X	X	X
PHYS 1C	X	X	X	X	X	X	X	X	X	X
PHYS 1D	X	X	X	X	X	X	X	X	X	X
CHEM 1A	X	X	X					X	X	X
CHEM 1B	X	X	X						X	X
CHEM 7A		X	X							
CHEM 7B (recommended)		X	X							
BIOL 110 (strongly recommended)		X								
BIOL 120 (strongly recommended)		X								
CSCI COURSE	CSCI 17	CSCI 17	CSCI 17	CSCI 17	CSCI 1	CSCI 1	CSCI 1	CSCI 1	CSCI 17	CSCI 17

HSSEAS GENERAL EDUCATION REQUIREMENTS:

HSSEAS requires the completion of one year of English prior to transfer but does not require completion of all the other general education requirements prior to transfer. However, students must meet minimum UC eligibility prior to transfer. **Students should concentrate on completing major preparation and meet minimum eligibility requirements (60 units to include the seven-course breadth (two UC transferable English Composition courses; UC transferable math; four courses from Arts and Humanities, Social and Behavioral Sciences, Physical and Biological Science) and major requirements) for admission to UCLA.**

- A. English 1A, **and** one course from 1B or 1C
If a student's native language is not English, he or she will be required to take the English as a Second Language Placement Examination (ESLPE) upon entering UCLA unless a second, more advanced English composition course (such as English 1B or 1C) has been completed and grades of B or better have been earned in both courses.
- B. Two (2) courses from Arts and Humanities (courses must come from two different subsections):
1) Literature and Cultural Analysis:
English 12, 15A, 20, 21, 31, 35, 36, 40A, 40B, 42, 43, 44; Japanese 25
2) Philosophical and Linguistic Analysis:
Philosophy 101, 103, 111, 120
3) Visual and Performance Arts:
Art 101, 102A, 102B, 102C, 106, 205A, 205B, 207; Music 111, 112, 215A, 215B;
Theatre 103, 104
- C. Two (2) courses from Society and Culture (one course from each subgroup):
1) Historical Analysis:
Anthropology 3; History 101 (formerly 1A), 102 (formerly 1B), 105 (formerly 18A), 106 (formerly 18B), 108 (formerly 9), 110 (formerly 16A), 111 (formerly 16B), 112 (formerly 17), 122, 140, 141, 143 (formerly 22), 154 (formerly 19), 162 (formerly 5A), 163 (formerly 5B), 165 (formerly 25), 175 (formerly 14A), 176 (formerly 14B), 177 (formerly 30)
2) Social Analysis:
Anthropology 2, 3; Geography 2, 5; Political Science 1, 2, 3, 5, 6, 10; Sociology 101, 104
- D. One (1) course from Life Sciences:
Anatomy 30, 32; Anthropology 1; Biology 101, 102, 103, 8, 10, 11, 15, 17; Microbiology 33; Physiology 31; Psychology 7

Notes: 1. Life sciences requirement is automatically satisfied for Bioengineering majors.

Recommended Web sites:

Transfer Admission Guide: <https://admission.ucla.edu/apply/transfer/deciding-on-major>

UCLA Samueli School of Engineering: <https://samueli.ucla.edu/>

UCLA Samueli Engineering Transfer Center: <https://etransfercenter.seas.ucla.edu/>

Articulation agreements for Engineering: www.assist.org

Important information for international applicants: <http://www.admissions.ucla.edu/prospect/intl.htm>