A Course of Study for

ENGINEERING - Transfer

Engineers apply the theories and principles of science and mathematics to research and develop economical solutions to practical technical problems. Their work is the link between scientific discoveries and commercial applications. Engineers design products, the machinery to build those products, the factories in which those products are made, and the systems that ensure the quality of the product and efficiency of the workforce and manufacturing process. There are a variety of engineering fields: electrical, mechanical, civil, industrial, aeronautical, chemical, materials, nuclear, petroleum and mining engineering.

This major may also lead to many other careers. For additional possibilities, visit the Career Services Center on campus to utilize computerized career information systems and other valuable career resources.

TRANSFR
IGETC is NOT Recommended.

Students planning to transfer to a four-year college should complete the lower-division major requirements and the general education pattern for the appropriate transfer institution. Santa Monica College has articulation agreements for this major with the following UC, CSU, and private institutions. Exact major requirements for these and other UC and CSU campuses can be found online at www.assist.org. Articulation agreements with private and out-of-state institutions can be found online at www.smc.edu/articulation.

Admission to Engineering programs is very competitive. Students should complete all lower division requirements prior to transfer to be competitive for admission.

Additionally, to be minimally eligible to transfer to a UC campus, transfer students must complete four (4) General Educational courses chosen from at least two of the following areas: Arts and Humanities; Sociology and Behavioral Sciences; Physical and Biological Science and two composition courses. Please see a Santa Monica College counselor for additional information.

The following universities offer engineering degrees in the following majors. Check www.assist.org for exact course requirements.

**UNIVERSITY OF CALIFORNIA, BERKELEY**
- B.S. Bioengineering/Materials Science and Engineering
- B.S. Chemical Engineering & Nuclear Engineering
- B.S. Chemical Engineering and Material Science and Engineering
- B.S. Computational Engineering Science
- B.S. Electrical Engineering & Computer Science/Materials Science & Engineering
- B.S. Electrical Engineering & Computer Science/Nuclear Engineering
- B.S. Industrial Engineering and Operations Research
- B.S. Manufacturing Engineering
- B.S. Materials Science and Engineering
- B.S. Materials Science and Engineering/Mechanical Engineering
- B.S. Materials Science and Engineering/Nuclear Engineering
- B.S. Mechanical Engineering/Nuclear Engineering

For specific course requirements for each of the majors listed above go to www.assist.org.

**UNIVERSITY OF CALIFORNIA, DAVIS**
- B.S. Aeronautical Science and Engineering
- B.S. Biochemical Engineering
- B.S. Biological Systems Engineering
- B.S. Chemical Engineering
- B.S. Chemical Engineering/Materials Science and Engineering
- B.S. Civil Engineering
- B.S. Computer Engineering
- B.S. Computer Science and Engineering
- B.S. Electrical Engineering
- B.S. Electronic/Materials Engineering

*ADDITIONAL INFORMATION ON REVERSE. SUBJECT TO CHANGE WITHOUT NOTICE.*

*www.assist.org

*Please access the above web-site for the most updated articulation information.*
UNIVERSITY OF CALIFORNIA, IRVINE

Aerospace Engineering
Chemical Engineering
Computer Engineering
Electrical Engineering
Engineering (general)

Other Engineering majors offered: Please see www.assist.org for details.

UNIVERSITY OF CALIFORNIA, LOS ANGELES

IGETC is NOT accepted

Aerospace Engineering/B.S.
Chemical Engineering/B.S.
Civil Engineering/B.S.
Computer Science and Engineering/B.S.
Electrical Engineering/B.S.
Mechanical Engineering/B.S.

The complete requirement is shown below. It is recommend that transfer applicants complete, in addition to the two required English Composition courses; 2-3 electives from those listed below. Students must complete at least one course from Social and Behavioral Science or Arts and Humanities to be eligible for admission. (HSSEAS does not accept IGETC certification, but courses may be selected from the IGETC areas in parentheses below).

To graduate from UCLA, you must have completed the following:

- English 1
- English 2 or 31
- One Engineering Ethics course, to be taken at UCLA
- One life science elective (not required for Bioengineering and Chemical Engineering majors)
  (select one from Biological Science, lab not required)
- Two electives from Foundations of Society and Culture: one from Historical Analysis and one from Social Analysis
  (select two courses from Social and Behavioral Science)
- Two electives from Foundations of Arts and Humanities: one from each of two chosen groups: the groups are Visual and Performance Art, Literature and Cultural Analysis Philosophical and Linguistic Analysis
  (select two courses from Arts and Humanities)

UNIVERSITY OF CALIFORNIA, RIVERSIDE - COLLEGE OF ENGINEERING

(Applications accepted only in Fall. IGETC is NOT accepted). See www.assist.org for general education requirements.

B.S. Chemical Engineering
Bioengineering option
Chemical Engineering option
Bioengineering option
B.S. Electrical Engineering
B.S. Environmental Engineering
B.S. Mechanical Engineering

Also recommended prior to transfer: four Humanities or Social Science courses chosen from UCR’s College of Engineering general education. Please see www.assist.org for a list of courses.

In an effort to serve prospective transfer students better, the College of Engineering’s Office of Student Academic Affairs has created a website to provide transfer students with answers to any questions they may have about transfer admission criteria, resources, majors, policies, or anything else related to the College. http://www.engr.ucr.edu/studentaffairs/tr_admit.shtml.

UNIVERSITY OF CALIFORNIA, SAN DIEGO

B.S. Computer Engineering
B.S. Electrical Engineering

CALIFORNIA POLYTECHNIC STATE UNIVERSITY, SAN LUIS OBISPO

B.S. Computer Engineering
B.S. Electrical Engineering
B.S. General Engineering

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

B.S. Civil Engineering
B.S. Electrical Engineering
B.S. Mechanical Engineering

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

B.S. Civil Engineering; Engineering; Manufacturing Systems Engineering; Mechanical Engineering
B.S. Computer Engineering
B.S. Electrical Engineering

*Please note that Critical Thinking is not required for admission for junior transfers entering as declared Engineering majors.

ADDITIONAL INFORMATION ON REVERSE. SUBJECT TO CHANGE WITHOUT NOTICE.

*www.assist.org

*Please access the above web-site for the most updated articulation information.
Santa Monica College has articulation agreements for this major (see [www.smc.edu/articulation](http://www.smc.edu/articulation) for exact requirements) with the following private and out-of-state-institutions:

### LOYOLA MARYMOUNT UNIVERSITY-FRANK R. SEAVER COLLEGE OF SCIENCE AND ENGINEERING

The Frank R. Seaver College of Science and Engineering offers degrees leading to the Bachelor of Arts, the Bachelor of Science and the Bachelor of Science in Engineering. The University Core requirements vary for each of the three degrees. The following link will take you to the General Education requirements:

[http://www.lmu.edu/about/services/registrar/articulation/list/santa_monica/core/Frank_R__Seaver_College_of_Science_and_Engineering.htm](http://www.lmu.edu/about/services/registrar/articulation/list/santa_monica/core/Frank_R__Seaver_College_of_Science_and_Engineering.htm).

Click on the major to view its core (general education) requirements.

See [www.lmu.edu/about/services/registrar/articulation/list/santa_monica.htm](http://www.lmu.edu/about/services/registrar/articulation/list/santa_monica.htm) for major requirements.

The School of Engineering offers the following majors:

- **B.A., B.S. Applied Mathematics**
- **B.S. Athletic Training**
- **B.S. Biochemistry**
- **B.S. Biology**
- **B.S. Chemistry**
- **B.S.E. (B.S. in Engineering) Civil Engineering**
- **B.S. Computer Science**
- **B.S.E. (B.S. in Engineering) Electrical Engineering**
- **B.S. Environmental Science**
- **B.A., B.S. Mathematics**
- **B.S.E. (B.S. in Engineering) Mechanical Engineering**
- **B.S. Natural Science**
- **B.S. Physics or Engineering Physics**

### POLYTECHNIC UNIVERSITY, NEW YORK

**For all Engineering Programs:** English 1, 2; History 2; Speech 1; Math 7, 8, 11, 15; CS 51; Chemistry 11; Physics 21, 22, 23;

Select twelve units total from group A and group B (at least one course must be from group B):

- **Group A:** Art 2, 3, 8; English 3, 4, 5, 6, 7, 8; History 55; Music 30, 31; Philosophy 1, 2, 6, 9, 22, 23, 51; Psychology 1;
- **Group B:** Psychology 2, 3, 13, 14, 19, 40


### UNIVERSITY OF SOUTHERN CALIFORNIA (USC)

See [http://viterbi.usc.edu/admission/transfer/guides.htm](http://viterbi.usc.edu/admission/transfer/guides.htm) for course requirements.

- **Aerospace Engineering**
- **Astronautical/Engineering**
- **Biomedical/Engineering**
- **Biomedical (Biochemical) Engineering**
- **Biomedical (Electrical) Engineering**
- **Biomedical (Mechanical) Engineering**
- **Chemical Engineering**
- **Civil Engineering**
- **Computer Science**
- **Computer Engineering**
- **Electrical Engineering**
- **Environmental Engineering**
- **Mechanical Engineering**