ORANGE COAST COLLEGE TRANSFER CURRICULUM GUIDE

ENGINEERING
Aerospace Engineering

LOWER DIVISION MAJOR REQUIREMENTS FOR TRANSFER

The following courses at OCC should be taken prior to transfer. Courses not offered at OCC will need to be taken after transfer. Four-year colleges and universities often make changes in their requirements for majors. The information contained in this guide is based on the most recent information available from the four-year school and does not constitute an official agreement. Recent updates to this Guide can be found on the Transfer Center website at: www.occ.cccd.edu/departments/studentsvcs/transferctr

### UNIVERSITY OF CALIFORNIA, IRVINE

**Important Note:** Preference is given to students with the highest grades overall who have completed the required courses.

**BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING**

**UCI**  
**OCC**

- **MATH 2AB & 2D**  
  MATH 180(or 180H) & 185(or 185H) & 280(or 280H)*
- **MATH 2E**  
  MATH 280(or 280H)
- **MATH 3D**  
  MATH 285(or 285H)
- **MATH 2J**  
  Satisfied by courses listed above
- **ENGR 54**  
  No Equivalent Course
- **EECS 70A**  
  ENGR 285
- **ENGRMAE 10**  
  CS 150
- **ENGRMAE 30**  
  ENGR 280
- **ENGRMAE 80, 91**  
  No Equivalent Courses
- **BIO SCI 93 or**  
  BIOL 181(or 181H) or
- **CHEM 1B**  
  CHEM 185
- **CHEM 1A/LE**  
  CHEM 180
- **PHYS 7BCDE/LB/LC/LD**  
  PHYS 185 & 280 & 285
- **PHYS 52A**  
  PHYS 285

*MATH 182H & 280(or 280H) will also satisfy this requirement.

**Required courses:** one year of calculus, one year of calculus-based physics, one course in general chemistry with lab and two additional courses listed above.

(2/09:A08-09)

### UNIVERSITY OF CALIFORNIA, LOS ANGELES

**BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING**

**Preparation Courses Required for Admission:**

- **UCLA**
  - CHEM 20AB, 20L
  - MATH 31AB
  - MATH 32AB
  - MATH 33AB
  - PHYS 1ABC, 4AL, BL
  - ENGRMAE 10
  - MATH 31AB
  - ENGCOMP 3
  - Computer Programming

- **OCC**
  - CHEM 180 & 185
  - MATH 180(or 180H) & 185(or 185H)*
  - MATH 280(or 280H)
  - PHYS 185 & 280 & 285**
  - ENGL 100
  - CS 250

**A second course in English composition from:** ENGL 101, 101H, 102, 102H, PHIL 150

**Additional Requirements:**

- **EL ENGR 100**
  - No Equivalent Course
- **MECH&AE 101**
  - No Equivalent Course
- **MECH&AE 102**
  - No Equivalent Course
- **MAT SCI 104**
  - No Equivalent Course

*MATH 182H is also equivalent to MATH 31AB.

**Entire physics sequence should be completed at OCC.**

(10/08:A10-11)

### CALIFORNIA STATE UNIVERSITY, LONG BEACH

Engineering transfer students may follow the new 12 unit lower division transfer agreement which includes the following requirements:  
- CSU eligibility based upon high school achievement or high school deficiency removed at the community college,  
- completion of the GE requirements in English and Mathematics with a grade of C or better,  
- complete at least 12 transferable units with grades of C or better,  
- declare a major in Engineering, and  
- complete at least 3 units of calculus (MATH 180 or 180H) or above or Students must complete 60 units and the CSU GE requirements in Written and Oral Communication, Critical Thinking and Mathematics/Quantitative Reasoning with a grade of “C” or better by the end of the prior spring term for fall admission or by the end of the prior summer for spring admission.

**BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING**

**CSULB**  
**OCC**

- **CHEM 111A**  
  CHEM 180
- **MATH 122 & 123**  
  MATH 180(or 180H) & 185(or 185H)*
- **MATH 224**  
  MATH 280(or 280H)
- **PHYS 151**  
  PHYS 185

Continued>>>>>>
PHYS 152 or PHYS 280 or
E E 210/210L No Equivalent Courses
ENGR 101 & 102 No Equivalent Courses**
MAE 101A No Equivalent Course
MAE 172 ENGR 180
MAE 205 No Equivalent Course
CE 205 ENGR 280

*MATH 182H is also equivalent to MATH 122 & 123.
**Requirement waived for transfer students who have completed
3 units in CSU GE Area E.

Note: This major has implemented competitive admissions. See
CSULB catalog for supplemental admission criteria. A grade of C
or better must be achieved in all required courses.

(02/17:A10-11)

CAL POLY, POMONA

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING
CPP

Required Core Courses
AERO 101L, 102L, 103L No Equivalent Courses
AERO 201L, 202L, 203L No Equivalent Courses

Required Support Course
ECE 231/231L ENGR 285
MAT 114, 115, 116 MATH 180(or 180H) & 185(or 185H)*
MAT 214, 215 MATH 280(or 280H)
MAT 216 No Equivalent Course
MTE 207 No Equivalent Course
PHYS 131/L, 132/L, 133/L PHYS 185, 280, 285 or 130, 135 & 285
ME 214/224L ENGR 280
ME 215 No Equivalent Course
CHM 121/121L/122L CHEM 180

*MATH 182H is also equivalent to MAT 114, 115, 116.

(209:A06-07)

SAN DIEGO STATE UNIVERSITY

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING
SDSU

CHEM 202 or MATH 150 &
151 MATH 180(or 180H) & 185(or 185H)*
MATH 252 MATH 280(or 280H)
PHYS 195/L No Equivalent Courses
PHYS 196 No Equivalent Course
PHYS 197 PHYS 285
A E 123 No Equivalent Course
E M 200 ENGR 280

*BIO 100 or Equivalent Course
ENGR 280 MATH 285(or 285H)
M E 101 No Equivalent Course
M E 202 No Equivalent Course
M E 240 No Equivalent Course

*Complete sequence. MATH 182H is also equivalent to MATH
150 & 151.

Note: This is an impacted program and requires a minimum BPA
of 2.0.

(10/08:A10-11)

CAL POLY SAN LUIS OBISPO

BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING
Options: Aeronautics, Astronautics
CPSLO

AERO 121 No Equivalent Course
AERO 215 No Equivalent Course
CHEM 124 CHEM 180
ENGL 149 ENGL 105
IME 144 No Equivalent Course
MATE 210 No Equivalent Course
MATH 141,142,143, 241 MATH 180(or 180H) & 185(or 185H)
& 280(or 280H)+
MATH 244 MATH 285(or 285H)
ME 211 ENGR 280
ME 212 No Equivalent Course
PHYS 131, 132, 133 PHYS 185 & 280 & 285
MATH 182H & 280H is also equivalent to MATH 141, 142, 143
& 241.

Note: Selection criteria for transfer students can be found at:
http://www.ess.calpoly.edu/_admiss/undergrad/prospective_transf.html

(10/08:A10-11)

UNIVERSITY OF SOUTHERN CALIFORNIA

BACHELOR OF SCIENCE IN ENGINEERING

General Education Requirement:
Six courses with one from each area:
I. Cultures and Civilization I*
II. Cultures and Civilizations II*
III. Scientific Principles*
IV. Investigations in Science and Technology**
V. Studies in Literature*
VI. Social Issues**

Composition Requirement:
ENGL 100 and 101(or 101H) or 102(or 102H)

Diversity Requirement:
See USC GE Agreement for courses which meet this
requirement.

Mathematics Requirement:
Either MATH 180(or 180H) & 185(or 185H) or 182H,
MATH 280(or 280H),

Physics Requirement:
PHYS 185, 280 and 285

Aerospace Major Requirement:
CHEM 180, MATH 285(or 285H)