

ORANGE COAST COLLEGE

TRANSFER CURRICULUM GUIDE

ENGINEERING

Industrial Engineering

LOWER DIVISION MAJOR REQUIREMENTS FOR TRANSFER

The following courses should be taken at OCC prior to transfer. Courses not offered at OCC will need to be taken after transfer unless otherwise noted. 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, BERKELEY

Notes: Admission to the College of Engineering is highly competitive. Selection is based on the completeness of lower division preparation, GPA and the applicant essay. The college reviews the essay for evidence of interest in the chosen field and a thoughtful match between the academic program and the academic and career objectives. You must complete all of the required lower division courses by the end of the spring term prior to fall enrollment to be eligible for admission. Summer coursework is not considered to be “work in progress” for fall selection. English 100 & 101(or 101H) must be completed with a letter grade and is a prerequisite for admission. IGETC is not acceptable for this major. When courses are listed as a series, you must complete entire series. No partial credit is given. All required and strongly recommended courses must be taken for a letter grade.

Breadth Requirements:

1. ENGL 100 & 101(or 101H)
2. **Two 3-unit GE breadth courses from:** Arts & Literature, Historical Studies, Philosophy & Values or Social & Behavioral Sciences
3. Two additional upper division courses taken after transfer.

AP Credit for Engineering Majors:

Course	Score
Biology	score of 4 or 5 = BIOL 1A/AL & 1B
Chemistry	score of 3, 4 or 5 = CHEM 1A/1AL
English	score of 4 or 5 = ENGL R1A
Calculus (AB/BC Exam)	score of 3 = MATH 1A
Calculus (BC Exam)	score of 4 or 5 = MATH 1AB
Physics (Mechanics C Exam)	score of 5 = PHYS 7A

BACHELOR OF SCIENCE INDUSTRIAL ENGINEERING & OPERATIONS RESEARCH (College of Engineering)

UCB	OCC	(9/17:A16-17)
Required for admission		
CHEM 1A/AL	CHEM 180	
MATH 1A	MATH 180(or 180H)*	
MATH 1B	MATH 185(or 185H)*	
MATH 53	MATH 280(or 280H)	
MATH 54	MATH 285(or 285H)	
PHYS 7A	PHYS 185	Continued

UCB	OCC	(9/17:A16-17)
PHYS 7B	PHYS 280	
ENGL R1AB	ENGL 100 & 101(or 101H)	
One courses from:	One courses from:	
COMOSCI 9C	CS 150	
COMPSCI 9F	CS 250	
COMPSCI 9G	No Equivalent Course	
Strongly Recommended Courses		
ENGIN 7	No Equivalent Course	
*MATH 182H is also equivalent to MATH 1AB.		

CAL POLY, POMONA

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

CPP	OCC	(09/17:A16-17)
Required Core Courses		
IE 225/225L	No Equivalent Courses	
IME 112	No Equivalent Course	
IME 113/113L	No Equivalent Courses	
IME 224/224L	No Equivalent Courses	
IME 239	No Equivalent Course	
MAT 114, 115, 116	MATH 180(or 180H) & 185(or 185H)*	
MAT 214, 215	MATH 280(or 280H)	
MAT 224	MATH 285(or 285H)	
MFE 126/126L	No Equivalent Courses	
MFE 201/201L	No Equivalent Courses	
PHYS 131/L, 132/L, 133/L	PHYS 185, 280, 285 <u>or</u> 130, 135 & 285	
Required Support Courses		
EGR 100/100L	No Equivalent Courses	
CHM 121/L, 122/L, 123/L	CHEM 180 & 185**	
ECE 231/231L	ENGR 285	
ME 214/224L	ENGR 280	
ME 218	No Equivalent Course	
MTE 207	No Equivalent Course	
EC 201 <u>or</u> 202	ECON 175 <u>or</u> 170	
*MATH 182H is also equivalent to MAT 114, 115, 116.		
**CHEM 185 may not be required for transfer students who have excess units within the College of Engineering of College of Science.		
Note: This program is impacted and requires a supplementary admission process.		

CAL POLY, SAN LUIS OBISPO

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

CPSLO	OCC	(09/17:A16-17)
Major Courses		
IME 101	No Equivalent Course	
IME 140	No Equivalent Course	
IME 141	No Equivalent Course	
IME 142	WELD 140 & 200	
IME 144	No Equivalent Course	
IME 156	No Equivalent Course	
IME 223	No Equivalent Course	
IME 239	BUS 240	
CE 207	No Equivalent Course	Continued

CPSLO	OCC	(09/17:A16-17)
Support Courses		
BIO 213 or BRAE 213	No Equivalent Courses	
CE 204	No Equivalent Course	
CHEM 124	CHEM 180	
CSC 232	No Equivalent Course	
EE 201 & 251	ENGR 285 & No Equivalent Course	
ENGL 149	ENGL 105*	
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	
MATE 210 & 215	No Equivalent Courses	
PHYS 132, 133 & 141	PHYS 185 & 280 & 285	
PSY 201 or 202	PSYC 100	
9 units of support electives from: BIOL 100, CHEM 220/220L, ENGR 280, MATH 105 & 110, WELD 140 & 200		
*Credit only when additional GE Area A3 course is completed.		
+MATH 182H & 280H is also equivalent to MATH 141, 142, 143 & 241.		
Note: Selection criteria for transfer students can be found at: http://admissions.calpoly.edu/applicants/transfer/criteria.html		

UNIVERSITY OF SOUTHERN CALIFORNIA

Note: Students may fulfill four of the six required GE requirements with transfer courses taken before starting USC (see USC GE requirements). Credit for courses is not granted if (1) the course is taken before high school graduation, (2) the grade is lower than C-, (3) is a lab science or foreign language course and is not taken in a traditional classroom setting, (4) is offered through “study abroad”, (5) repeats credit from another college course or from an AP or IB exam.

BACHELOR OF SCIENCE IN INDUSTRIAL AND SYSTEMS ENGINEERING

USC	OCC	(09/17:A16-17)
WRIT 130	ENG 101 (or 101H) or 102 (102H)*	
Global Perspectives	ANTH 150 or PSCI 110 or SOC 150	
Traditions & Historical	One course from: ARCH 290(or 290H), 296(or 296H), ART 100(or 100H), 101(or 101H), 103, ENGL 176(or 176H), HIST 141, 161(or 161H), 162(or 162H), 170(or 170H), 175(or 175H), 180(or 180H), 185(or 185H), PHIL 125, PSCI 188, RLST 110, 140, 150, THEA 101	
MATH 125 & 126	MATH 180(or 180H) & 185(or 185H or 182H)+	
MATH 225	No Equivalent Course	
MATH 226	MATH 280(or 280H)+	
PHYS 151 & 152	PHYS 185, 280 & 285	
CHEM 105A	CHEM 180	
*Course must be taken for a letter grade.		
+Subject credit for MATH 180(or 180H) can be earned by successful completion of MATH 185(or 185H). Subject credit for MATH 180(or 180H) & 185(or 185H) can be earned by successful completion of MATH 280(or 280H).		

ADDITIONAL AGREEMENTS ARE AVAILABLE ON THE INTERNET FOR THE FOLLOWING SCHOOLS AT:

www.assist.org

Campus	Campus
CSU East Bay	San Jose State