

A unique partnership leading to your degree in Civil Engineering

Two of Southern California's leading educational institutions have created a
2 + 2 articulation agreement to expedite your studies to become a Civil Engineer

GLENDALE COMMUNITY COLLEGE

Engineering Drafting Department (818) 240-1000 ext. 5541

GENERAL EDUCATION AT GCC

Required General Education Lower Division Courses

It is recommended that you take all ten courses below at GCC.

- | | | |
|--------------------------|-----------------------------------|--|
| <input type="checkbox"/> | ENGL 101 | Freshman English |
| <input type="checkbox"/> | SPCH 101 | Public Speaking |
| <input type="checkbox"/> | HIST 110, 117 or 118 [†] | United States History or History of the United States |
| <input type="checkbox"/> | POLS 106+105* | American State and Local Government <u>and</u> American Political Ideals |
| <input type="checkbox"/> | AREA C (3 courses) | Arts, Literature, Philosophy and Foreign Language |
| <input type="checkbox"/> | AREA E (1 course) | Lifelong Understanding and Self-Development |
| <input type="checkbox"/> | ENGL 104 | Critical Thinking and Argumentation |

[†] HIST 110 is the recommended history course. However, you can also meet the Cal State L.A.'s U.S. History requirement by taking HIST 117 or 118.

* See advisor for other available options.

COURSES IN MAJOR PROGRAM AT GCC

Basic Sciences and Mathematics

- | | | |
|--------------------------|----------|---------------------------------|
| <input type="checkbox"/> | CHEM 101 | General Chemistry |
| <input type="checkbox"/> | MATH 103 | Calculus and Analytic Geometry |
| <input type="checkbox"/> | MATH 104 | Calculus and Analytic Geometry |
| <input type="checkbox"/> | MATH 105 | Calculus and Analytic Geometry |
| <input type="checkbox"/> | MATH 108 | Ordinary Differential Equations |
| <input type="checkbox"/> | PHY 101 | Engineering Physics |
| <input type="checkbox"/> | PHY 102 | Engineering Physics |
| <input type="checkbox"/> | PHY 103 | Engineering Physics |

Lower Division Technical Courses

- | | | |
|--------------------------|-------------|--|
| <input type="checkbox"/> | CS/IS 150** | FORTRAN Programming |
| <input type="checkbox"/> | DRAFT 141 | Fundamentals of Computer-Aided Drafting and Design |
| <input type="checkbox"/> | ECT 101 | Electronics Circuits I (DC) |
| <input type="checkbox"/> | ENGR 100 | Introduction to Engineering |
| <input type="checkbox"/> | MATP 146 | Materials and Processes |

** May substitute a course in any high-level programming language (i.e., CS/IS 130, CS/IS 135, CS/IS 137, CS/IS 139, CS/IS 140, CS/IS 145).

CAL STATE L.A.

Department of Civil Engineering (323) 343-4450

GENERAL EDUCATION AT CAL STATE L.A.

General Education Upper Division Theme

- Upper Division GE Theme ♦ 3 courses

♦ A biology course must be included as part of GE Upper Division Theme

Note: You must select two **diversity** courses from among the GE courses you take at Cal State L.A.

COURSES IN MAJOR PROGRAM AT CAL STATE L.A.

Lower Division Engineering Courses

- | | | |
|--------------------------|-----------------------------------|--|
| <input type="checkbox"/> | CE 195 | Civil Engineering Design I |
| <input type="checkbox"/> | CE 202 | Plane Surveying |
| <input type="checkbox"/> | CE 290 | Numerical Methods for Engineers |
| <input type="checkbox"/> | CE/ME 201 [formerly ENGR 201] | Statics |
| <input type="checkbox"/> | CE/ME 205 [formerly ENGR 205] | Strength of Materials I |
| <input type="checkbox"/> | CE/ME 210*** [formerly ENGR 210] | Matrix Algebra for Engineers |
| <input type="checkbox"/> | CE/ME 211**** [formerly ENGR 211] | Statistics and Probability for Engineers |

*** Credit will be granted for students who take MATH 107 at Glendale Community College.

**** Credit will be granted for students who take MATH 136 at Glendale Community College.

Upper Division Engineering Courses

- | | | |
|--------------------------|-----------|---|
| <input type="checkbox"/> | ENGR 300 | Economics for Engineers |
| <input type="checkbox"/> | ENGR 301 | Ethics and Professionalism in Engineering |
| <input type="checkbox"/> | ENGL 306 | Technical Writing |
| <input type="checkbox"/> | ME 326A | Thermodynamics I |
| <input type="checkbox"/> | CE/ME 303 | Fluid Mechanics I |
| <input type="checkbox"/> | CE/ME 312 | Strength of Materials Laboratory I |
| <input type="checkbox"/> | CE/ME 313 | Fluid Mechanics Laboratory I |
| <input type="checkbox"/> | CE/ME 320 | Dynamics I |
| <input type="checkbox"/> | CE 360 | Structural Mechanics I |
| <input type="checkbox"/> | CE 361 | Introduction to Structural Design I |
| <input type="checkbox"/> | CE 364 | Concrete Laboratory |
| <input type="checkbox"/> | CE 366 | Soil Mechanics I |
| <input type="checkbox"/> | CE 368 | Soil Mechanics Laboratory |
| <input type="checkbox"/> | CE 370 | Transportation Engineering |
| <input type="checkbox"/> | CE 384 | Introduction to Environmental Engineering |
| <input type="checkbox"/> | CE 487 | Design of Water Resources Systems |
| <input type="checkbox"/> | CE 495 | Civil Engineering Design Project |

Technical Electives

- | | | |
|--------------------------|--------------------------------|-----------------------------|
| <input type="checkbox"/> | CE DESIGN ELECTIVES | 2 design courses |
| <input type="checkbox"/> | CE DESIGN OR LECTURE ELECTIVES | 2 design or lecture courses |
| <input type="checkbox"/> | CE LABORATORY ELECTIVE | 1 laboratory course |

Note: You are required to take the Writing Proficiency Examination (WPE) prior to completing 135 quarter units.

Effective November 1999