

A unique partnership leading to your degree in Civil Engineering

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

EAST LOS ANGELES COLLEGE

Department of Engineering and Technology (323) 265-8858

GENERAL EDUCATION AT ELAC

General Education Lower Division

It is recommended that you take English 101 and Speech 101 plus **four** courses from the list below. The **three** remaining courses along with the three courses required to satisfy the GE Upper Division Theme will be useful in balancing the technical course load at Cal State L.A.

- | | | |
|--------------------------|---------------------|---|
| <input type="checkbox"/> | ENGL 101 | College Reading and Composition I |
| <input type="checkbox"/> | SPCH 101 | Oral Communication I |
| <input type="checkbox"/> | U.S. HISTORY* | HIST 5 or 6 or 11 or 12 |
| <input type="checkbox"/> | POL SCI 1 | The Government of the United States |
| <input type="checkbox"/> | BLOCK C (3 courses) | Humanities |
| <input type="checkbox"/> | BLOCK E (1 course) | Lifelong Understanding and Self-Development |
| <input type="checkbox"/> | ENGL 103** | Composition and Critical Thinking |

* HIST 11 and 12 are equivalent to Cal State L.A.'s HIST 202A and 202B respectively. You can also meet the Cal State L.A.'s U.S. History requirement by taking HIST 5 or HIST 6.

** English 103 is not a General Education course, but is a Cal State L.A. university graduation requirement

COURSES IN MAJOR PROGRAM AT ELAC

Basic Sciences and Mathematics

- | | | |
|--------------------------|----------|--------------------------------------|
| <input type="checkbox"/> | CHEM 101 | General Chemistry I |
| <input type="checkbox"/> | MATH 261 | Calculus I |
| <input type="checkbox"/> | MATH 262 | Calculus II |
| <input type="checkbox"/> | MATH 263 | Calculus III |
| <input type="checkbox"/> | MATH 275 | Ordinary Differential Equations |
| <input type="checkbox"/> | PHYS 1 | Mechanics of Solids |
| <input type="checkbox"/> | PHYS 2 | Mechanics of Fluids, Heat, and Sound |
| <input type="checkbox"/> | PHYS 3 | Electricity and Magnetism |

Lower Division Engineering Courses

- | | | |
|--------------------------|---------------|--|
| <input type="checkbox"/> | GEN ENGR 101 | Introduction to Science, Engineering, and Technology |
| <input type="checkbox"/> | GEN ENGR 121 | Engineering Applications of Digital Computation |
| <input type="checkbox"/> | GEN ENGR 131 | Statics |
| <input type="checkbox"/> | GEN ENGR 151 | Materials of Engineering |
| <input type="checkbox"/> | GEN ENGR 211 | Computer Augmented Design Techniques I |
| <input type="checkbox"/> | GEN ENGR 221 | Engineering Probability and Statistics |
| <input type="checkbox"/> | GEN ENGR 241 | Strength of Materials |
| <input type="checkbox"/> | CIV ENGR 121 | Plane Surveying I |
| <input type="checkbox"/> | CIV ENGR 122 | Plane Surveying I F |
| <input type="checkbox"/> | ELEC ENGR 220 | Electrical Circuits I |
| <input type="checkbox"/> | GEN ENGR 231 | Dynamics |
| <input type="checkbox"/> | GEN ENGR 242 | Strength of Materials Laboratory |
| <input type="checkbox"/> | GEN ENGR 272 | Principles of Engineering Economy |

CAL STATE L.A.

Department of Civil Engineering (323) 343-4450

GENERAL EDUCATION AT CAL STATE L.A.

General Education Lower Division

- | | | |
|--------------------------|-------|--|
| <input type="checkbox"/> | _____ | Insert GE holdover course (See ELAC GE note) |
| <input type="checkbox"/> | _____ | Insert GE holdover course (See ELAC GE note) |
| <input type="checkbox"/> | _____ | Insert GE holdover course (See ELAC GE note) |

General Education Upper Division Theme

- | | | |
|--------------------------|----------------------------|-----------|
| <input type="checkbox"/> | 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 290 | Numerical Methods for Engineers |

Upper Division Engineering Courses

- | | | |
|--------------------------|-----------|---|
| <input type="checkbox"/> | ENGR 301 | Ethics and Professionalism in Engineering |
| <input type="checkbox"/> | ENGL 306 | Technical Report Writing |
| <input type="checkbox"/> | ME 326A | Thermodynamics I |
| <input type="checkbox"/> | CE/ME 303 | Fluid Mechanics I |
| <input type="checkbox"/> | CE/ME 313 | Fluid Mechanics Laboratory 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.