

# A unique partnership leading to your degree in Mechanical Engineering

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

## L.A. VALLEY COLLEGE

Department of Electronics/Engineering (818) 781-1200 ext. 2561

### GENERAL EDUCATION AT L.A. VALLEY COLLEGE

#### Required General Education Lower Division Courses

- |                          |                         |  |
|--------------------------|-------------------------|--|
| <input type="checkbox"/> | ENGLISH 101             | College Reading and Composition I  |
| <input type="checkbox"/> | HISTORY 11 or 12 or 13* | Political and Social History of U.S. I or II or<br>The U.S. in Twentieth Century |
| <input type="checkbox"/> | SPEECH 101              | Oral Communication I   |

It is recommended that you take **four** of the six courses listed below. The **two** remaining lower division GE 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"/> | ENGLISH 103         | Critical Thinking and English Composition          |
| <input type="checkbox"/> | POL SCI 1           | The Government of the U.S.                         |
| <input type="checkbox"/> | BLOCK C (3 courses) | Humanities   |
| <input type="checkbox"/> | BLOCK E (1 course)  | Integrated Psychological and Physiological Studies |

\* HISTORY 11 or 12 is equivalent to Cal State L.A.'s HIST 202A and HISTORY 13 is equivalent to Cal State L.A.'s HIST 202B. See advisor for other available options.

### COURSES IN MAJOR PROGRAM AT L.A. VALLEY COLLEGE

#### Basic Sciences and Mathematics

- |                          |            |  |
|--------------------------|------------|--|
| <input type="checkbox"/> | CHEM 101   | General Chemistry I                      |
| <input type="checkbox"/> | MATH 265   | Calculus with Analytic Geometry I        |
| <input type="checkbox"/> | MATH 266   | Calculus and Analytic Geometry II        |
| <input type="checkbox"/> | MATH 267   | Calculus and Analytic Geometry III       |
| <input type="checkbox"/> | MATH 275   | Ordinary Differential Equations          |
| <input type="checkbox"/> | PHYSICS 37 | Physics for Engineers and Scientists I   |
| <input type="checkbox"/> | PHYSICS 38 | Physics for Engineers and Scientists II  |
| <input type="checkbox"/> | PHYSICS 39 | Physics for Engineers and Scientists III |

#### Technical Courses

- |                          |                        |   |
|--------------------------|------------------------|---|
| <input type="checkbox"/> | CSIT 813 or MATH 175** | Beginning FORTRAN Programming or<br>Mathematical Elements of Computer Programming |
| <input type="checkbox"/> | GEN ENGR 101           | Introduction to Science, Engineering, and Technology                              |
| <input type="checkbox"/> | GEN ENGR 112           | Engineering Descriptive Geometry  |
| <input type="checkbox"/> | GEN ENGR 151           | Materials of Engineering  |
| <input type="checkbox"/> | GEN ENGR 243           | Statics and Strength of Materials   |

\*\* May substitute a course in any high-level programming language.

## CAL STATE L.A.

Department of Mechanical Engineering (323) 343-4490

### GENERAL EDUCATION AT CAL STATE L.A.

#### General Education Lower Division

- |                          |                   |   |
|--------------------------|-------------------|---|
| <input type="checkbox"/> | Lower Division GE | 2 remaining courses (See LA Valley 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/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                |
| <input type="checkbox"/> | EE 210 ▶▶                       | Electrical Measurement Laboratory                       |
| <input type="checkbox"/> | ME 204 ▶▶                       | Mechanical Engineering Measurements and Instrumentation |

▶ It is recommended that students take CE/ME 210 and CE/ME 211 at Cal State L.A. However, credit will be granted for students who take MATH 270 and MATH 225, respectively, at LA Valley College.

▶▶ It is recommended that students take EE 210 and ME 204 at Cal State L.A. However, credit will be granted for students who take ELECTRONICS 20 (prerequisite: ELECTRONICS 4A and 4B) at LA Valley College.

#### Upper Division Engineering Courses

- |                          |           |   |
|--------------------------|-----------|---|
| <input type="checkbox"/> | CE/ME 303 | Fluid Mechanics I                         |
| <input type="checkbox"/> | CE/ME 312 | Strength of Materials I Laboratory        |
| <input type="checkbox"/> | CE/ME 320 | Dynamics I                                |
| <input type="checkbox"/> | ENGR 300  | Economics for Engineers                   |
| <input type="checkbox"/> | ENGR 301  | Ethics and Professionalism in Engineering |
| <input type="checkbox"/> | ME 306    | Heat Transfer I                           |
| <input type="checkbox"/> | ME 310    | Mechanical Measurements Laboratory        |
| <input type="checkbox"/> | ME 319    | Computer-Aided Mechanical Engineering     |
| <input type="checkbox"/> | ME 323    | Machine Design I                          |
| <input type="checkbox"/> | ME 326A   | Thermodynamics I                          |
| <input type="checkbox"/> | ME 326B   | Thermodynamics II                         |
| <input type="checkbox"/> | ME 327    | Manufacturing Processes                   |
| <input type="checkbox"/> | ME 497A   | Mechanical Engineering Senior Project     |
| <input type="checkbox"/> | ME 497B   | Mechanical Engineering Senior Project     |
| <input type="checkbox"/> | ME 497C   | Mechanical Engineering Senior Project     |

#### Technical Electives

- |                          |                         |                      |
|--------------------------|-------------------------|----------------------|
| <input type="checkbox"/> | ME LECTURE ELECTIVES    | 6 lecture courses    |
| <input type="checkbox"/> | ME LABORATORY ELECTIVES | 3 laboratory courses |

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

Effective April 2000