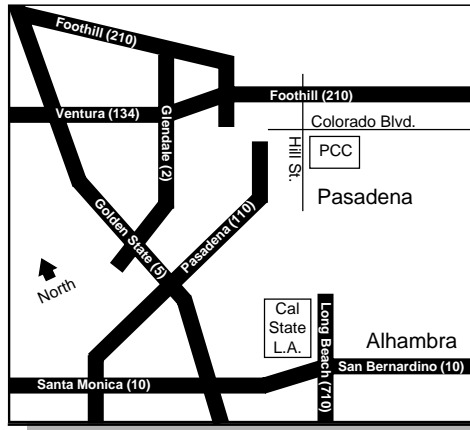


## Directions to Cal State L.A. and Pasadena City College



### Driving Directions to Pasadena City College

Pasadena City College is located in the heart of Pasadena just 12 miles from downtown Los Angeles. To reach PCC from Cal State L.A., take one of two possible routes:

- From Paseo Rancho Castillo turn left on Mariondale. Proceed to Valley Blvd. and turn right (east). Turn left (north) on Atlantic Blvd. (which will become Los Robles Ave.). Proceed to Colorado Blvd. and turn right (east).
- Take the San Bernardino Fwy. (10) west to the Golden State Fwy. (5) north to the Pasadena Fwy. (110) north, which turns into Arroyo Parkway. Proceed to Colorado Blvd. and turn right (east).

### Driving Directions to Cal State L.A.

Cal State L.A. is located five miles east of downtown Los Angeles at the interchange of the San Bernardino (10) and Long Beach (710) Freeways. To reach Cal State L.A. from PCC, take one of two possible routes:

- From Colorado Blvd., turn left (south) on Los Robles Ave. (will become Atlantic Blvd.). Turn right (west) on Valley Blvd. Turn left on Mariondale and follow the signs to Paseo Rancho Castillo, then turn right.
- Take the Pasadena Fwy. (110) south to the Golden State Fwy. (5) south to the San Bernardino Fwy. (10) east. Exit at Eastern Ave. and turn left.

### Important Cal State L.A. Telephone Numbers

School of Engineering and Technology .....	(323) 343-4500
Department of Technology .....	(323) 343-4550
Engineering and Technology Outreach Office .....	(323) 343-5604
M.E.S.A. Engineering Program (MEP) .....	(323) 343-4527
Educational Opportunity Program .....	(323) 343-4367
Office of Admissions and University Outreach .....	(323) 343-3901
Scholarship Office .....	(323) 343-3266
Student Housing Services .....	(323) 343-4800
Center for Student Financial Aid .....	(323) 343-1784

For more information on Cal State L.A.'s Engineering programs, you can contact us via:

email: [techno@calstatela.edu](mailto:techno@calstatela.edu) • phone: (323) 343-5604 • fax: (323) 343-4555

Visit our web site at <http://www.calstatela.edu/academic/engr/tmp/et/>

Please include your name, address, phone number and what term you expect to transfer.

Transferring from  
Pasadena City College  
to  
Cal State L.A.  
in

# Industrial Technology

with Emphasis in

# Machine Shop

(Manufacturing Technology)



*Partners in your future!*



## Launching Your Technology Study at Pasadena City College

### Introducing Pasadena City College

Since 1924, Pasadena City College (PCC) has been a springboard to success for motivated individuals seeking to further their education and advance their careers. PCC is the third largest single-campus community college district in the nation and today offers 70 vocational and technical programs and 60 academic programs, with class offered during the day, evenings and weekends. PCC specializes in outstanding yet affordable lower-division and preprofessional programs for a highly diverse student population. At PCC 380 full-time faculty and another 400 part-time faculty serve more than 28,000 students. Located on 53 acres just 12 miles from downtown Los Angeles, PCC draws students from throughout Southern California, many of whom come to campus for programs that are unavailable anywhere else.



### Learning in State-of-the-Art Facilities

Because we are committed to balancing theory with practice, we maintain extensive, up-to-date technology laboratories. PCC provides state-of-the-art computer programs, designed to continue integrating computer technology across the curriculum. We have been able to stay on top of all the latest developments, enabling us to install state-of-the-art microcomputers, 3-D CAD and simulation software, and electronic test equipment. With Jet Propulsion Laboratory (JPL) in our community, we are in the unique position to access additional equipment when we need it.

PCC doesn't feel like a big, impersonal institution. We offer small classes and labs, ensuring adequate hands-on experience for all students. It's no wonder PCC is known for its mission of providing a rigorous education that empowers students to develop the skills and abilities necessary to make rational decisions in a changing technological society.

### Making the Most of Your Opportunities at PCC

As comprehensive as our courses are, the technology program at PCC consists of far more than just classes. PCC offers approximately 50 student clubs and organizations covering a wide spectrum of educational and recreational interests, encouraging students to develop a well-rounded breadth of knowledge that is sought by employers.



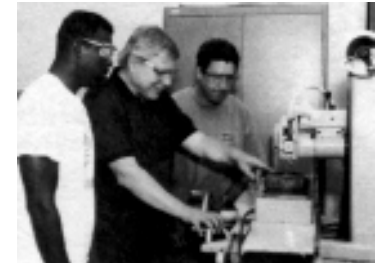
A workshop for technology majors provides the opportunity to learn about career options and explore the different programs available within the major. Once you decide to become a technology major, you will meet with a counselor to set up an educational plan based on the "2+2 articulation agreement" in the following centerfold. This semester-by-semester plan of courses will keep you on track to reaching your goal.

### The PCC Advantage in Technology

Technology is one of the most popular majors at PCC. Of all the choices students have for completing their lower-division technology coursework, none offers the individual attention and personalized programs that Pasadena City College does. The Division of Engineering and Technology is able to work with students to customize the program to one that best fits the student's unique needs, as well as affording students the opportunity to create and package their own learning situation.

PCC offers transfer programs in industrial technology with emphases in manufacturing, electronics, power, energy, and transportation, and engineering design. In addition to general education courses, we offer all of the required physics, chemistry, and algebra classes, as well as selected courses in drafting and all aspects of machine shop technology.

One advantage that keeps our technology programs on top of the latest advances is that each program has its own advisory committee. These committees, comprised of high-level members of industry who are also employers of technology graduates, review our curriculum and suggest enhancements, as well as updating us on changes in the industry.



### A Faculty of Distinction

The core of any program is its faculty, and at PCC, we are proud to have superbly qualified instructors with extensive industry experience in all technology disciplines. Many students find that our faculty are their best source of information about career preparation and coursework to transfer to four-year institutions such as Cal State L.A. If you need more information about classes or your career goals, don't hesitate to get in touch with the faculty members in the Division of Engineering and Technology:

Faculty Member	Office	Phone Number
Division Office	V212	(626) 585-7267
Nabil Abu-Ghazaleh (Dean)	V212	(626) 585-7681
Craig Gillingham	V105	(626) 585-7306
Ralph Gutierrez	V105	(626) 585-7049
Patrick Pandolfi	V210	(626) 585-7312

### Transferring is as Easy as 2+2

PCC is in the top 10 statewide for transfers to four-year institutions. In 1985 we piloted a dedicated Transfer Center enabling us to increase the amount of transfer-related activities and information we offer. Thanks to this state-funded program, PCC has a very strong support base for transfers, which strengthens the ties to Cal State L.A. The two institutions have long had a close relationship and share a commitment to balancing theory and practice. In addition, both are dedicated to serving a diverse, highly motivated student body.

By completing the lower-division coursework detailed in the following centerfold, and earning at least a 2.0 GPA, you can rest assured that your studies at Pasadena City College will dovetail perfectly with the requirements at Cal State L.A. If you have any questions about transferring into Cal State L.A.'s highly-rated technology programs, don't hesitate to call them at (323) 343-5604. Cal State L.A.'s faculty and staff are ready to help you meet your educational and professional goals.

# A unique partnership leading to your degree in Industrial Technology

## with Emphasis in Machine Shop (Manufacturing Technology)

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

### PASADENA CITY COLLEGE

Division of Engineering and Technology (626) 585-7267

#### GENERAL EDUCATION AT PCC

##### Required General Education Lower Division Courses

- |                          |                   |   |
|--------------------------|-------------------|---|
| <input type="checkbox"/> | BIOL 2 or 4 or 11 | Animal Biology or Plant Biology or General Biology        |
| <input type="checkbox"/> | ENGL 1A           | Reading and Composition                                   |
| <input type="checkbox"/> | ENGL 1B           | Reading and Composition                                   |
| <input type="checkbox"/> | ENGL 1C           | Intermediate Composition – Critical Thinking and Argument |
| <input type="checkbox"/> | SPEECH 1          | Fundamentals of Speech                                    |

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"/> | U.S. HISTORY*       | HIST 7A, 7B, 25A, 25B, 29A, or 29B                 |
| <input type="checkbox"/> | POLSCI 1            | Introduction to American Government                |
| <input type="checkbox"/> | BLOCK C (2 courses) | Arts, Literature, Philosophy and Foreign Languages |
| <input type="checkbox"/> | BLOCK D (1 course)  | Social, Political and Economic Institutions        |
| <input type="checkbox"/> | BLOCK E (1 course)  | Lifelong Understanding and Self-Development        |

\* You can meet the Cal State L.A.'s U.S. History requirement by taking any **one** course from HIST 7A, 7B, 25A, 25B, 29A, 29B.

#### COURSES IN MAJOR PROGRAM AT PCC

##### Basic Sciences and Mathematics

- |                          |                 |   |
|--------------------------|-----------------|---|
| <input type="checkbox"/> | CHEM 2A         | Chemistry – General, Organic and Biochemistry   |
| <input type="checkbox"/> | MATH 3          | College Algebra                                 |
| <input type="checkbox"/> | PHYS 10 and 10L | Descriptive Introduction Physics and Laboratory |

##### Lower Division Technical Courses

- |                          |          |                                       |
|--------------------------|----------|---------------------------------------|
| <input type="checkbox"/> | ACCTG 1A | Accounting                            |
| <input type="checkbox"/> | DRFTG 8A | Mechanical Drafting I                 |
| <input type="checkbox"/> | DRFTG 17 | Computer Aided Drafting and Design    |
| <input type="checkbox"/> | ELTRN 9  | Principles of DC and Network Analysis |

##### Advanced Technical Courses

- |                          |             |                         |
|--------------------------|-------------|-------------------------|
| <input type="checkbox"/> | MACH 220A** | Machine Shop Technology |
| <input type="checkbox"/> | MACH 220B** | Machine Shop Technology |
| <input type="checkbox"/> | MACH 220C** | Machine Shop Technology |
| <input type="checkbox"/> | MACH 220D** | Machine Shop Technology |

\*\* Non-transferable courses. Credit will be granted for Cal State L.A. courses TECH 454L, TECH 463, TECH 464, and TECH 465 upon matriculation as a Cal State L.A. Technology major.

### CAL STATE L.A.

Department of Technology (323) 343-4550

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

##### General Education Lower Division

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

##### General Education Upper Division Theme

- |                          |                         |           |
|--------------------------|-------------------------|-----------|
| <input type="checkbox"/> | Upper Division GE Theme | 3 courses |
|--------------------------|-------------------------|-----------|

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.

##### Technical Courses

- |                          |          |  |
|--------------------------|----------|--|
| <input type="checkbox"/> | CS 190   | BASIC Programming                              |
| <input type="checkbox"/> | TECH 101 | Industrial Safety for Industrial Education     |
| <input type="checkbox"/> | TECH 150 | Introduction to Higher Education in Technology |
| <input type="checkbox"/> | TECH 200 | History of Technology                          |
| <input type="checkbox"/> | TECH 380 | Industrial Graphic Communications              |
| <input type="checkbox"/> | TECH 381 | Materials, Process and Fabrication Technology  |
| <input type="checkbox"/> | TECH 382 | Power Technology                               |
| <input type="checkbox"/> | TECH 398 | Cooperative Education                          |
| <input type="checkbox"/> | TECH 400 | Written Communication Skills                   |
| <input type="checkbox"/> | TECH 414 | Robotics in Industry                           |
| <input type="checkbox"/> | TECH 481 | Practicum in Industrial Studies                |
| <input type="checkbox"/> | TECH 482 | Metrics for Industry                           |
| <input type="checkbox"/> | TECH 484 | Automated Manufacturing Systems                |
| <input type="checkbox"/> | TECH 488 | Fluid Power                                    |
| <input type="checkbox"/> | TECH 489 | Industrial Training Methods                    |

##### Required Management Courses

- |                          |          |  |
|--------------------------|----------|--|
| <input type="checkbox"/> | ECON 209 | Applied Business and Economics Statistics I  |
| <input type="checkbox"/> | ECON 309 | Applied Business and Economics Statistics II |
| <input type="checkbox"/> | MATH 242 | Math for Business and Economics Majors       |
| <input type="checkbox"/> | MGMT 306 | Production and Operations Management         |
| <input type="checkbox"/> | MGMT 467 | Quality Control                              |

##### Required Elective

- |                          |                     |  |
|--------------------------|---------------------|--|
| <input type="checkbox"/> | MANAGEMENT ELECTIVE | Select 1 course from ENGR 300, MGMT 460, MGMT 461, MGMT 462, MGMT 463, MGMT 464, MGMT 473, PSY 442 |
|--------------------------|---------------------|--|

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



## **Manufacturing Technology at Cal State L.A.:** **A Local Focus; A National Reputation**

A solid grounding in theory, extensive hands-on experience. The resources of a major university, the personal attention of a small school. An outstanding education and modest tuition. A long history of leadership, state-of-the-art facilities, and up-to-date curriculum.

If you're looking for a manufacturing technology program that offers the best of all possible worlds, you owe it to yourself to check out Cal State L.A. Flexible enough to accommodate working students, and so distinguished as to have attracted the attention of industry leaders, academic colleagues, and major funding agencies, our nationally recognized programs are the most direct path to a rewarding career in this growing field.

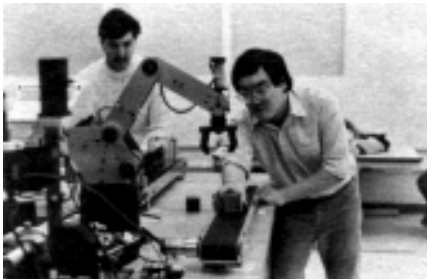
### Getting Acquainted With Cal State L.A.

Cal State L.A. is a comprehensive university dedicated primarily to undergraduate education. Serving some 19,000 students, it offers more than 50 undergraduate and graduate degree programs in academic and professional fields. It is an ethnically and culturally diverse university, with a student body that represents 120 different countries.

The university of choice for working students, Cal State L.A. is located close to downtown Los Angeles and the San Gabriel Valley. It specializes in providing diverse, often nontraditional students with the knowledge, experience, and support they need to earn their degrees and advance their careers.

### Cutting-Edge Facilities

Central to our practical orientation are our classrooms and laboratories, which are currently undergoing a \$31 million renovation. By the time you enroll at Cal State L.A., we will have one of the finest facilities of any undergraduate institution in the nation. All instructional spaces will be connected through a fiberoptic backbone and will feature the latest equipment. Within our state-of-the-art manufacturing wing, you'll gain firsthand experience with cutting-edge technologies, including parametric solid modeling, rapid prototyping, and integrated automated manufacturing. You'll work with computer-controlled manufacturing equipment, as well as robotic and vision systems - the same equipment you'll find in industry and a real advantage when you seek your first job as a technologist.



### Personal Attention from Distinguished Faculty

At the heart of our outstanding reputation is our eminent faculty, who work closely with students to ensure their success. All classes are taught by professors, not teaching assistants, and faculty do all grading and advising, remaining unusually accessible to students.

Because Cal State L.A. is primarily an undergraduate institution, students benefit from these close faculty ties in another important way. Faculty bring industry-funded research and consulting projects into the classroom, providing students with hands-on experience solving practical, real-world problems.

### A Curriculum to Advance Your Career

Your program in machine shop technology at PCC is preparing you to become a versatile professional who knows how to implement projects and get things done. Just two more years of coursework in manufacturing technology at Cal State L.A., however, will prepare you to become a technical manager - a supervisor of technologists - and open the doors to a lifetime of opportunity.



In addition to theory and more in-depth coursework in your area of specialization, our curriculum in industrial technology, emphasis in manufacturing technology, will teach you how to integrate technologies to function as a system. You'll learn CAD/CAM, fluid power, robotics, and technical management skills, including safety, quality control, industrial management, and industrial training.

You'll take part in our practicum course, the final step in your learning experience, in which technology students become employees in a virtual corporation and operate in teams to produce real products. Finally, you'll have an internship - an experience that turns into full-time employment for most of our students after graduation.

### Beyond the Classroom

As a technology student at Cal State L.A., you can participate in as many or as few extracurricular activities as you like - we have a wide range to appeal to everyone's interests. Among the most meaningful are the student design competitions, for which we have earned a well-deserved national reputation. It was our students that designed the national champion solar-powered vehicle, the Solar Eagle III, as well as our mini baja vehicles that won first place three out of the last four years in the Mini Baja West.

In addition, we have chapters of the major professional engineering and technology societies, including our very active National Association of Industrial Technology (NAIT) student organization.

### The Professional Touch

We cultivate close ties to industry, maintaining an industry advisory board for the School and for our manufacturing technology program. Our industry connections lead to numerous internship opportunities for technology students, and are responsible for our outstanding track record in placing students after graduation. Our graduates generally work in small or medium-sized companies, in such areas as plant management, training, and quality assurance, as well as technical fields that require coordination or leadership.

### Transferring into Manufacturing Technology at Cal State L.A.

After you've checked off the courses on the left hand side of the brochure, transferring into Cal State L.A. is a smooth process.

For an application, call (323) 343-5604, or send us an e-mail at [techno@calstatela.edu](mailto:techno@calstatela.edu).

