# ENGINEERING AND INDUSTRIAL TECHNOLOGY

Transfer Requirements

The following requirements for the major are subject to change without notice. To assure that this information is current, you should consult with an Engineering and Industrial Technology counselor or review articulation agreements via the Internet at WWW.ASSIST.ORG You may also consult the Articulation Officer for specific articulation agreements.

**CAREER OPPORTUNITIES**: Industrial Technologists perform high-level technical work in the creation, production, utilization, and distribution of industrial materials, products and processes. Their work includes planning, estimating, expediting, coordinating, specification and proposal writing, facilities planning and development, production and quality control, and safety management. Potential employers are in such fields as construction, electronics, manufacturing, metals, printing and quality assurance. Some positions involve administrative, management and industrial marketing responsibilities. The employment outlook is very favorable based on current industrial expansion and increasing complexity of modern technology.

## CALIFORNIA STATE UNIVERSITY, LOS ANGELES

B.S. in Industrial Technology: Options available in Aviation Administration, Graphic Communications, Fire Protection Administration and Industrial Technology. These programs allow students to develop expertise in specific technical areas including: automated manufacturing and robotics, computer aided design (CAD), computer aided manufacturing (CAM), electronics, design/drafting, graphic communications/printing, manufacturing, and power, energy and transportation. Graduates of these programs are employed in a wide range of careers including managers, management representatives, administrators, production supervisors, trainers, technical support specialists, and technology educators. It is **highly recommended** that students speak with an adviser about the individual options at (323) 343-4550 or email tech@calstatela.edu

Aviation Administration: The lower division program is completed at a community college or other four-year institutions. Several community colleges offer lower division aviation programs and are listed on CSULA's website: http://www.calstatela.edu/academic/ecst/tech/aviation/community_college_links.htm . Students should contact CSULA for further information regarding this major (email: kmew@calstatela.edu). Required: English 1C; Recommended pre-requisites for upper division courses are: Business 1A-1B; Econ 1, 2; Law 5; CIS 13
Graphic Communications: The major combines graphic arts with business management. Requirements: English 1C; Bus 1A-1B; Econ l, 2; Law 5; CIS 13
Industrial Technology: English 1C; Chemistry 21A; CIS 13; Physics 11 and 12; Math 130; Recommended: Electronics 110, 112, 120, 122 130; Business 1A-1B; Econ 1; Math 150, 160
Fire Protection Administration and Technology: English 1C; Fire Science 2, 4, 5, 6, 20 and fire science electives to total 15-21 units. Recommended: Fire Science 8, 9, 10; Sociology 101, 109

## CALIFORNIA STATE UNIVERSITY, LONG BEACH

B.S. in Engineering Technology:
All Options: Chemistry 1A; Physics 2A-2B; CADD 5; CIS 13; Math 120 at CSULB or Math 190 at ECC.
Recommended: Math 170 (as preparation for Math 120 at CSULB)

Options: Environmental Technology: No comparable courses available at ECC
Manufacturing Technology: Add MTT 13A
Quality Assurance: Add Law 5; MTT 13A

B.S. in Electronics and Computer Engineering Technology: Options in Electronics Technology and Computer Technology: Chemistry 1A; Physics 2A-2B; ECHT 120; CIS 13; CADD 5; Math 120 at CSULB or Math 190 at ECC. Recommended: Math 170 (as preparation for Math 120 at CSULB)

**CALIFORNIA STATE UNIVERSITY, CHICO**

Construction Management: Business 1A-1B; Chemistry 1A-1B; Economics 1, 2; Math 190; Physics 2A-2B. A minimum grade of C or better is required in Accounting, English Composition (Area A2), Calculus, and Physics.
Manufacturing Technology: Business 1A; Chemistry 1A-1B; Economics 1, 2; Math 150, 190; Physics 2A-2B
Concrete Industry Management-a multidisciplinary program offered by the College of Engineering
Computer Science, and Construction Management- is only one of four programs in the nation. See a Math/Science Counselor for more information.

**CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA**

B.S. in Engineering Technology: Options available in Electronics and Computer Engineering Technology, Construction Engineering, or General Engineering Technology
Core Requirements for all Options: CADD 5 or 34abcd; Chemistry 1A; Computer Science 25; Physics 2A and 2B or 3A and 3B; Engineering 9; Recommended: Math 180
Construction Engineering Option: No additional requirements
Electronics and Computer Engineering Technology Option: Add Electronics 110. 112, 122, 130 or 131; Computer Science 15P
General Engineering Technology Option: Includes Environmental emphasis, Manufacturing emphasis, or Mechanical emphasis: Add Welding 1.

**CALIFORNIA STATE POLYTECHNIC UNIVERSITY, SAN LUIS OBISPO**

B.S. in Industrial Technology
Core Requirements: Chemistry 20 or 1A; Business 1A-1B; Mathematics 160 or 190 and one course from Math 150 or Psychology 9A or Sociology 109; Physics 2A-2B or 3A-3B; Economics 5

**SAN FRANCISCO STATE UNIVERSITY**

B.A. in Industrial Arts: Option in Product Design and Development
Core Requirements: no courses articulated
BS in Industrial Technology
Core Requirements: Math 160; Math 150; Chemistry 21A

**SAN JOSE STATE UNIVERSITY**

B.S. in Industrial Technology: Options available in Electronics and Computer Technology and Manufacturing Systems
Core Requirements for both Options: Chemistry 1A; Economics 2; Physics 2A-2B

**ELECTRONICS AND COMPUTER HARDWARE TECHNOLOGY**
Course Number Comparison Effective: Fall 2002

| Electronics (Old Numbers) | Units | Electronics and Computer Hardware Technology (New Numbers) | | Units |
|---|---|---|---|---|
| 102 | 4 | 110 | Introduction to Direct and Alternating Current Circuits | 3 |
| 103 | 4 | 112 | Advanced Direct and Alternating Current Circuits | 3 |
| 104 | 4 | 120 | Semiconductor Circuits I | 3 |
| 105 | 4 | 122 | Semiconductor Circuits II | 3 |