



**ECONOMIC &
WORKFORCE
DEVELOPMENT**
through the
CALIFORNIA
COMMUNITY
COLLEGES

**BUSINESS AND WORKFORCE
PERFORMANCE IMPROVEMENT INITIATIVE**



Industry Scan Report Los Angeles County

Green Building Related Community College Programs in Southern California



Center of Excellence

Los Angeles Community College District

November 2007



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Green Building: Related Community College Programs in Southern California

November 2007

Prepared By:

Center of Excellence, EWD Region 7
Los Angeles County
Los Angeles Community College District
770 Wilshire Blvd, Los Angeles, CA 90017
Phone: (213) 891-2162 Fax: (213) 891-2055
lewenble@laccd.edu
www.cccewd.net

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OUR MISSION IS TO STRENGTHEN CALIFORNIA'S WORKFORCE AND ADVANCE ECONOMIC GROWTH THROUGH EDUCATION, TRAINING AND JOB DEVELOPMENT.

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Community College Programs Related to Green Building

Many community colleges are moving forward on developing courses in Green Building that address specific occupations, such as solar panel technician, or that may offer a more general understanding of the practice of sustainable building. Community colleges have historically offered a core of programs in traditional construction that could be easily adapted to train workers for green building. As a supplement to the industry scan, a regional list of community college programs in southern California associated with traditional construction, construction support, and architecture activities has been developed. These programs could be adapted to assist students to acquire skills needed to be successful in these areas. The programs include: Architecture, Civil and Construction Management Technology, Environmental Control Technology (HVAC), Energy Systems Technology, Construction Crafts Technology, and Landscape Design and Maintenance.

This list also includes an informal inventory of specific courses, programs, and projects related to green technologies that are currently being offered or developed at community colleges throughout the state. This list is by no means comprehensive, but it provides some examples of ways California community colleges are recognizing the growing need in this area.

TOP Code Definitions

The following inventory includes existing traditional construction related programs from the California Community College system. These are well established areas that could be reviewed, modified and adapted to include courses or programs to help students gain skills for green building. Although many colleges in Northern California also offer these programs, only Southern and some Central California colleges have been included.

0957.00 – Civil and Construction Management Technology

Application of procedures and techniques related to civil and construction management, including estimating and bidding, scheduling and control, inspection, building systems, construction practices, quality control, labor and safety practices. It also includes public works management.

0946.00 – Environmental Control Technology (HVAC)

Assembly, installation, operation, maintenance, and repair of air conditioning, heating, and refrigeration systems.

0946.10– Energy Systems Technology

Theory and methods of energy conservation applied to heating, cooling, and related systems, including the measurement and assessment of energy

consumption, diagnosis and prescription. This includes alternative energy systems.

0952.00 – Construction Crafts Technology

Lay out, fabrication, erection, installation, and repair of buildings, highways, airports, and other structures and fixtures, including framing, construction materials, estimating, blueprint reading, and use of tools.

0952.20 – Electrical

Installation, operation, maintenance and repair of electrical systems in buildings, including residential, commercial, and industrial electric power wiring and motors, controls, and electrical-distribution panels.

0109.10 – Landscape Design and Maintenance

Design, maintenance, and management of landscape areas, including residential, commercial, parks, and golf courses.

Key to the Column Headings

T.O.P. The Taxonomy of Programs is a system of nomenclature for designating programs in the California Community College system. This inventory now uses the Sixth Edition of the TOP (corrected version, November 2004) updated March 2007. The complete T.O.P. may be viewed on the Chancellor's Office Web site at http://www.cccco.edu/divisions/esed/aa_ir/credit/credit_attachments/toptax.doc.

Cert Units. Number of core units and restricted electives required for a certificate. Expressed as semester units.

Degree Units. Number of core units and restricted electives required for the major, and any closely associated prerequisites, in a degree program. Excludes general education and open electives. Expressed as semester units.

Degree Type. "A" indicates Associate in Arts, "S" indicates Associate in Science, and "B" indicates that both an Associate in Arts and an Associate in Science are available.

Year Approved. Either the year of initial Chancellor's Office approval; or, for some programs, the year the program was first offered locally.

0201.00 Architecture and Architectural Technology

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Cerritos College Architectural (Transfer)		25.00	A	1964	09896
Comment: Includes trigonometry and economics; does not include as much drafting as architectural technology. Additional math and physics suggested.					
Cerritos College Architectural Technology	34.00	34.00	A	1962	02201
Comment: Includes coursework in architectural design theory, building codes and construction, freehand drawing, history of architecture, etc..					
Desert, College of the Architectural Technology	35.50	34.00	S	1970	04341
Comment: Employment. Includes several drafting courses.					
Desert, College of the Architectural Technology		40.50	S	1970	10198
Comment: Transfer oriented.					
East Los Angeles College Architectural GIS/MAPS	6.00			2003	00000
East Los Angeles College Architectural Computer-Aided Design	34.00	48.00	A	1995	08252
Comment: Similar to Architectural Drafting, but includes more advanced CAD courses.					
East Los Angeles College Architectural Drawing	12.00			2003	00000
East Los Angeles College Architectural Transportation Planning	6.00	40.00	A	2003	00000
East Los Angeles College Architectural Computer-Aided Design AutoCAD	6.00			2003	00000
East Los Angeles College Architectural Drafting	31.00	45.00	A	1970	02430
East Los Angeles College Architectural Drawing	12.00			2003	00000
East Los Angeles College Architectural Computer-Aided Design	12.00			2003	00000
East Los Angeles College Architectural Graphics	9.00			2003	00000
Comment: Includes architectural design, history, illustration, etc.					
Fullerton Architecture	39.00	31.00	S	1970	03819

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Comment: Certificate is called Architectural Technician.					
Glendale College Architectural Drafting	42.00	42.00	S	1970	02547
Golden West College Architectural Technology	36.00	36.00	A	1967	11414
Comment: Prepares for employment as an architectural drafter or technician Transfer also possible.					
Long Beach City College Architectural Design (Transfer)	37.00	24.00	S	1970	02617
Comment: Includes math and physics.					
Los Angeles City College Architecture		35.00	A	1970	02717
Comment: Emphasis on architectural drawing. Introduction to CAD.					
Los Angeles Harbor College Architecture and Technology	17.00			1999	00000
Los Angeles Harbor College Architecture and Technology	17.00			1964	00000
Los Angeles Harbor College Architecture and Technology	24.00	50.00	S	1949	02768
Los Angeles Pierce College Architecture and Technology	37.00	48.00	A	1970	02814
Los Angeles Trade-Technical Architectural Tech: Digital Design	17.00			2000	00000
Los Angeles Trade-Technical Architectural Tech: Computer Aided Drafting	12.00			2001	00000
Los Angeles Trade-Technical Architectural Technology	47.00	47.00	A	1970	08467
Los Angeles Trade-Technical Historic Preservation	17.00			2005	00000
Los Angeles Valley College Architecture	28.00			1992	08526
Comment: Emphasis on architectural drawing. Includes intro to CAAD.					
Mira Costa College Architectural Technology	21.00	21.00	A	1994	07863
Comment: Degree is called "Architecture," certificate is called "Architectural Technology."					
Mount San Antonio College Architectural Technology Level III	52			2000	12077
Comment: Requires Level II coursework, plus advanced project, 3D illustration and animation, etc., and 6 additional units of general education.					
Mount San Antonio College	46			2000	12076

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Architectural Technology Level II					
Comment: Requires Level I coursework plus advanced design, architectural presentation, etc, and additional 3 units of general education					
Mount San Antonio College Architectural Technology Level I	31		S	1991	08081
Comment: Includes basic and architectural CAD. Requires 6 units general education.					
Mount San Antonio College Architectural Technology	19.00	19.00	B	1970	03955
Comment: Includes CAD, environmental design, etc.					
Orange Coast College Architectural Technology: Architectural Drafting	19.00	19.00	B	1970	03955
Orange Coast College Architectural Technology: Architectural Drafting and Design	40.00	40.00	B	2006	16887
Orange Coast College Architecture		18.00	B	1970	14409
Comment: Any 18 units of architecture.					
Rio Hondo College Architectural Computer Assisted Design & Drawing	28.00	40.00	S	1980	09141
Comment: Includes 11 unit "Architecture & Engineering Drawing & CADD Technology" core of graphics and CAD courses. Employment oriented; includes and advanced CADD course not included in "Architecture."					
Rio Hondo College Architecture		35.00	S	1970	03175
Comment: Includes 11 unit "Architecture & Engineering Drawing & CADD Technology" core of graphics and CAD courses. Transfer oriented, but very similar to "Architectural Computer Assisted Design & Drawing."					
Riverside City College Architectural Graphics	9.00			2004	00000
Riverside City College Architecture	27.00	27.00	S	1996	10019
Saddleback College Architectural Drafting	40.00	40.00	B	1970	04047
San Bernardino Valley College Computer-Aided Drafting Technician	36.00			1970	09235
San Bernardino Valley College Architectural Technology		38.00	A	1970	04858
Comment: Four design courses required.					
San Diego Mesa College	17.00			1970	00000

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Architecture Technician					
Comment: Certificate of Completion.					
San Diego Mesa College Architecture: Woodbury Transfer Track	40.00	40.00	S	1998	11726
Comment: Transfer to Woodbury University in San Diego which has professional architecture program.					
San Diego Mesa College Architecture: Transfer	17.00			1970	00000
Comment: Certificate of Completion.					
San Diego Mesa College Landscape Architecture Technician	9.00			1970	00000
Comment: Certificate of Completion.					
San Diego Mesa College Architecture: Survey	31.00	31.00	S	1970	09381
Comment: Combination program; includes courses in landscape architecture, architectural design, delineation, construction practices.					
San Diego Mesa College Landscape Architecture Technician	29.00	26.00	S	1970	05300
Comment: Requires primarily architecture coursework.					
San Diego Mesa College Architecture Technician	28.00	28.00	S	1970	05302
Comment: Includes estimating, site engineering.					
San Diego Mesa College Architecture: Transfer	39.00	34.00	S	1970	09382
Southern College Architecture Technology	37.00	37.00	S	1971	05372
Southern College Architecture		37.00	S	1971	08153
Comment: Includes CAD, architectural practice, office applications, etc.					

0946.00 Environmental Control Technology (HVAC)

Assembly, installation, operation, maintenance, and repair of air conditioning, heating, and refrigeration systems.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Year Projected
Antelope Valley College Refrigeration Specialist	20.00	20.00	S	1970	
Antelope Valley College Air Conditioning Specialist	20.00	20.00	S	1970	
Antelope Valley College Air Conditioning-Refrigeration Specialist	40.00	40.00	S	1970	
Comment: Certificate options: refrigeration specialist (20 units), air conditioning specialist (20 units), air conditioning-refrigeration specialist (40 units),					
Citrus College Heating and Air Conditioning		18.00	S	1985	
Citrus College Heating and Air Conditioning	14.00			1985	
Comment: Skill award.					
Cypress College Air Conditioning & Refrigeration	56.00	46.00	S	1970	
Desert, College of the Air Conditioning & Refrigeration	27.00	40.00	S	1970	
Comment: Also offered: transfer pattern to CSULA.					
El Camino College Air Conditioning and Refrigeration	44.00	35.00	S	1952	
Comment: Certificate of Competence (3.0 gpa) or Certificate of Completion (2.0 gpa) available.					
Imperial Valley College Air Conditioning and Refrigeration Technology	17.00			2004	
Long Beach City College Air Conditioning & Refrigeration (Theory & Practical Exp.)	40.00	40.00	S	1970	
Long Beach City College Air Conditioning & Refrigeration (Theory Only)	30.00	30.00	S	1975	
Comment: Student is provided the basic theory, upgrading and/or continuing education in air conditioning & refrigeration.					
Los Angeles Trade-Technical	36.00			1970	

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Year Projected
Operation & Maintenance Engineering: Steam Plant					
Los Angeles Trade-Technical Fundamentals of Refrigeration and Air Conditioning	16.00			2006	
Los Angeles Trade-Technical Refrigeration & Air Conditioning Mechanics	48.00	48.00	S	1970	
Comment: A.S. degree (48) and certificate offered during day; A.A. degree (44) offered at night. Both cover similar subject matter					
Mount San Antonio College Air Conditioning & Refrigeration	37.50	37.50	S	1970	
Orange Coast College Heating & Air Conditioning: HVAC Technology	27.00	27.00	B	1970	
Palomar College Air Conditioning/Heating/Refrigeration (ROP)	13.00			1984	
Riverside City College Air Conditioning & Refrigeration	29.00	29.00	S	1975	
San Bernardino Valley College Refrigeration and Air Conditioning	31.00	31.00	S	1971	
San Diego City College Heating, Ventilation, & Air Conditioning Apprenticeship	24.00	24.00	S	2001	
Comment: Apprenticeship only. Requires 24 units of HVAC coursework. Sponsor: Associated Builders & Contractors of San Diego					
San Diego City College Basic Refrigeration and Control Systems	11.00			1970	
Comment: Certificate of completion.					
San Diego City College Stationary Engineering Hospital & Gen. Maintenance Tech.	32.00			1970	
San Diego City College Air Conditioning, Heating, & Advanced Refrigeration	31.00	36.00	S	1970	
Comment: Degree is called "Air Conditioning, Refrigeration, & Environmental Control Technology"; requires certificate plus 5 units of advanced HVAC/refrigeration systems design.					
San Diego City College Heating, Ventilation, & AC Refrigeration Systems Design	25.00			1970	

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Year Projected
San Joaquin Delta College Refrigeration	34.00			1980	
San Joaquin Delta College Heating and Air Conditioning: Refrigeration	49.00	64.00	S	1982	
Comment: Design and troubleshooting of electrical controls and mechanical systems.					

0946.10 Energy Systems Technology*

Theory and methods of energy conservation applied to heating, cooling, and related systems, including the measurement and assessment of energy consumption, diagnosis and prescription. This also includes alternative energy systems.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
De Anza College Energy Management and Climate Policy	10.00			1996	00000
De Anza College Energy Management and Climate Policy	24.00			1996	00000
De Anza College Energy Management and Climate Policy	36.00	46.00	A	1996	10137
Merritt College Environmental Design and Energy Technology	29.00	29.00	S	1981	01240

- * This area of study relates closely to emerging occupations in green construction such as Energy Auditor. Although these two colleges are located in Northern California, they have been included in the appendix as they are the only colleges in the California Chancellor's Office Program Inventory listed as offering Top Code 0946.10.

0952.00 Construction Crafts Technology

Lay out, fabrication, erection, installation, and repair of buildings, highways, airports, and other structures and fixtures, including framing, construction materials, estimating, blueprint reading, and use of tools.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved
El Camino College Construction Technology	40.00	34.00	S	1949
Fullerton College Construction Technology	29.00	24.00	S	1970
Long Beach City College Home Remodeling and Repair Technician	12.00			2001
Orange Coast College Construction Technology: Master Construction Specialist	54.00	54.00	B	1996
Orange Coast College Construction Technology: Basic Construction Practices	20.00	20.00	B	1990
Comment: Requires sequence including safety, blueprints, codes, finish carpentry.				
Orange Coast College Residential Utilities	9.00			1991
Comment: Professional Upgrade Certificate of Completion.				
Orange Coast College Construction Basics	10.00			1991
Comment: Professional Upgrade Certificate of Completion.				
Orange Coast College Introduction to Construction	10.00			1991
Comment: Professional Upgrade Certificate of Completion.				
Orange Coast College General Contracting & Development	9.00			1991
Comment: Professional Upgrade Certificate of Completion.				
Orange Coast College Construction Tech.: Residential Construction Development	18.00	18.00	B	1990
Comment: Up to three awards may be obtained: each requires taking any 18 units of construction coursework. Designed for those already in the field.				
Pasadena City College Building Construction	44.00	44.00	S	1970
Comment: Primarily carpentry.				

0952.20 Electrical

Installation, operation, maintenance and repair of electrical systems in buildings, including residential, commercial, and industrial electric power wiring and motors, controls, and electrical-distribution panels.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Antelope Valley College Electrical Technology	34.00	34.00	S	2002	14414
Comment: Includes fundamentals of electricity, electrical codes, residential and commercial wiring, motor controls, etc.					
Cerritos College Apprenticeship: Electrical Trades				1997	00000
Comment: Apprenticeship only.					
Los Angeles Trade-Technical Electrical Construction and Maintenance	48.00	48.00	S	1970	02910
Comment: A.S. degree (48) and certificate offered during day. A.A. degree (43) in "Construction Technologies, Electrical" offered at night and geared toward those working in the field.					
Los Angeles Trade-Technical Electrical Construction & Maintenance: Construction Tech	43.00	43.00	A	1970	08481
Los Angeles Trade-Technical Electrical Cable Splicer Apprenticeship	18.00			1970	08483
Comment: Apprenticeship only.					
Los Angeles Trade-Technical Voice Data Video and Fire Life Safety Technician	15.00			2006	00000
Los Angeles Trade-Technical Electrical Const & Maint: Programmable Logic Controllers	9.00			2001	00000
Los Angeles Trade-Technical Electrical Const & Maint: National Electrical Code	15.00			2001	00000
Los Angeles Trade-Technical Electrical Const & Maint: Motor Control	15.00			2001	00000
Los Angeles Trade-Technical Basic Electrical Trainee	17.00			2006	00000
Palomar College Sound Technician Apprenticeship	48.00	48.00	A	2004	15493
Comment: Sponsor; San Diego Electrical Training Trust Joint Apprenticeship Council. Installation of low voltage building systems such as access control, audio, fire/life safety, nurse call, intrusion detection, computer networks, closed circuit TV, fiber optic cable, etc.					

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Palomar College Apprentice Sound & Communications Systems Installer	40.00	40.00	A	1995	08930
Comment: Apprenticeship only. Mainly electrical wiring, also with some electronic equipment.					
Palomar College Apprentice Inside Wireman	56.00	56.00	A	2006	16969
Palomar College Apprentice Electrician	56.00	56.00	A	1988	05221
Comment: Apprenticeship only.					
San Diego City College Construction Trades - Electrical Trade Option	24.00	24.00	S	2000	11887
Comment: Sponsor: Associated Builders and Contractors, San Diego.					
San Diego City College Construction Electronic Systems Technician Option	18.00	18.00	S	2006	16775
Santiago Canyon College Apprenticeship: Industrial Electrical	30.00	30.00	B	2000	11985
Comment: Apprenticeship only.					

0953.10 Architectural Drafting

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Canyons, College of the Architectural Drafting	33.00	44.00	S	1975	02284
Comment:					
Chaffey College Drafting Technician: Architectural	37.00	26.00	S	1970	04774
Citrus College Architectural Drafting: CAD	19.00			1984	11235
Comment: Includes CAD, residential floor plans and structure design, commercial and industrial buildings, digital media, etc.					
Citrus College Architectural Design	19.00			1979	11234
Golden West College Computer Aided Drafting--Architectural	11.50			2005	00000
Long Beach City College Architectural Drafting—Core Skills	20.00			2003	14898

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Comment: Entry-level skills to prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects. Includes CADD.					
Moorpark College Drafting Technology/CAD: Architectural Option	27.00			1967	06862
Comment: Requires 18-unit drafting core, plus specialty coursework.					
Palomar College Architectural Drafting Technology	40.00	40.00	A	1970	05168
Pasadena City College Drafting: CAD Designer Architectural/Engineering/Construct	15.00			2005	00000
Pasadena City College Drafting: CAD Designer Architectural/Engineering/Construct	9.00			2003	00000
Pasadena City College Drafting: CAD Modeling & Animation – Architecture/Eng. Cons	12.00			2005	00000
Santa Ana College Architectural/Civil Engineering/Construction Drafting & Desi	25.00	25.00	B	1970	04212
Comment: Does not include the math included in Engineering Drafting & Design, but includes more CAD.					

0957.00 Civil and Construction Management Technology

Application of procedures and techniques related to civil and construction management, including estimating and bidding, scheduling and control, inspection, building systems, construction practices, quality control, labor and safety practices.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved
Canyons, College of the Construction Management Technology	36.00	36.00	S	2006
Desert, College of the Construction Management (Employment Oriented)	29.00	42.00	S	1992
Comment: Employment oriented. Includes construction surveying, construction planning and estimating, etc.				
Desert, College of the Construction Management (Transfer)		37.00	S	1992
Comment: Includes courses in management and supervision.				

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved
Fullerton College Construction Management		24.00	S	1970
Comment: Includes entrepreneurship, estimating, various business courses, construction materials, etc				
Fullerton College Construction Estimating	17.00			2001
Los Angeles Pierce College Architecture: Construction Technology	33.00	45.00	S	1970
Comment: "Designed to prepare a person for employment in construction inspection." However, coursework is broad.				
Orange Coast College Construction Field Management	10.00			1991
Comment: Professional Upgrade Certificate of Completion.				
San Diego Mesa College Construction Management	29.00	29.00	S	1970
Comment: Offered under Architecture department.				
Southwestern College Construction Management	34.00	34.00	S	1975
Ventura College Construction Technology -- Construction Management Option	30.00	30.00	S	1986

0109.10 Landscape Design and Maintenance

Design, maintenance, and management of landscape areas, including residential, commercial, parks, and golf courses.

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Antelope Valley College Landscape Construction	53.00	53.00	S	1999	11649
Comment: Degree title: "Agriculture/Park & Landscape Management." Prepares students for State Landscape Contractors exam, and to start a landscape maintenance business.					
Cuyamaca College Irrigation Technology	33.00	33.00	S	1985	07744
Cuyamaca College Landscape Technology	33.00	33.00	S	1980	05047
Comment: Includes pest control, landscape construction, introductory landscape design, etc.					
Cuyamaca College Landscape Design	36.00	36.00	S	2000	12108
Comment: Includes landscape construction, contracting, computer-aided landscape design, irrigation, etc.					

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
Includes higher-level design and construction coursework than "Landscape Technology."					
Fullerton College Landscape Management	30.00	18.00	S	1970	03817
Comment: Certificate is called Landscape Design/Management.					
Fullerton College Landscape Irrigation	30.00			1970	08383
Los Angeles Pierce College Landscape Installation and Maintenance Industry		47.00	S	1971	02812
Los Angeles Pierce College Landscape Technician: Basic	30.00			1970	08312
Los Angeles Pierce College Landscape Technician: Advanced	40.00			1970	10727
Los Angeles Pierce College Landscape Planning and Design		50.00	S	1970	08311
Comment: Although they have a common core, Landscape Installation and Maintenance is somewhat more focused on construction and upkeep; includes pest control applicator training. Landscape Planning and Design includes more plant identification and design-oriented courses.					
Mira Costa College Irrigation Technology	15.00			2002	00000
Mira Costa College Landscape Management	30.00	30.00	A	1970	05110
Comment: Requires 15-unit environmental landscaping core, plus specialty coursework in turfgrass, irrigation systems, maintenance practices.					
Mira Costa College Landscape Assistant	12.00			1998	00000
Mount San Antonio College Landscape Irrigation	27.00			1988	08049
Mount San Antonio College Landscape & Park Maintenance	30.00			1989	08047
Mount San Antonio College Landscape Design & Construction	27.00			1970	02994
Mount San Antonio College Tree Care & Maintenance	24.00			1987	08051
Mount San Jacinto College Landscaping Operations	6.00			2005	00000
Saddleback College General Landscape Design	9.00			2003	00000
Comment: Occupational Skills Award					
Saddleback College Landscape Design	22.00	22.00	B	1974	09773

College Name Local Title	Cert Units	Degree Units	Degree Type	Year Approved	Unique Code
San Diego Mesa College Garden Design	16.00			1996	00000
Comment: Certificate of Completion.					
Southwestern College Landscape Architecture	39.00	39.00	S	1975	08148
Southwestern College Landscape Occupations	39.00	39.00	S	1975	08150
Comment: "All phases of landscape design, construction, turf management, and landscape management."					
Southwestern College Landscape Design	33.00			1975	08149
Ventura College Env. Horticulture: Landscape Construction & Management	33.00	33.00	S	1970	10515
Comment: Requires 24 unit Landscape Horticulture core, plus 18 units specialty coursework.					
Ventura College Env. Hort: Landscape Architecture & City & Regional Planning	33.00	33.00	S	1970	07620
Comment: Requires 24 unit Landscape Horticulture core, plus AutoCAD, irrigation systems, and microcomputer applications.					
Ventura College Landscape Management	24.00			1970	07621

Courses, Programs, and Projects Related to Green Building

FACILITY/INSTITUTION	DESCRIPTION
<p>Santa Barbara City College 506 Chapala Street Santa Barbara, CA 93101 Contact: Dr. Ben Partee Assistant: Cindy Salazar Email: salazar@sbcc.edu Tele. (805)965-0581 x2278</p>	<p>In development: <u>“Built Green Conference Expo”</u>. Scheduled on June 13 & 14, at Santa Barbara City College. <i>(More information will be available in January 2008)</i></p>
<p>Santa Monica College 1744 Pearl Street Santa Monica, Ca 90405 Contact: Radina Valova Email: valova_radina@smc.edu Tele. (310)458-8716</p>	<p><u>“Sustainable Works”</u>. Funded by the City of Santa Monica, and housed in the Center for Environmental and Urban Studies. Sustainable Works promotes sustainable practices in the urban environment.</p>
<p>LA/Orange Environmental Center 1830 W. Romneya Dr. #102 Anaheim, CA 92801 Contact: Perla Fickenscher Email: PFickenscher@sce.cc.ca.us Tele. (714)808-4620</p>	<p><u>“Marketing Green”</u>. Provides assistance (eco-friendly practices) to businesses, local agencies and communities to be in compliance with regulatory agencies. <i>(In the process of getting certified)</i></p>
<p>Citrus College 1000 West Foothill Blvd Glendora, CA 91741 Contact: Kim Holland Email: KHolland@citruscollege.edu Tele. 626-914-8701</p>	<p>Offers courses in “Water Technology” and “Heating and Air Conditioning”. Adapting courses to sustainable technologies.</p>
<p>El Camino College 16007 Crenshaw Blvd Torrance, CA 90566 Contact: John Means Email: jmeans@elcamino.edu Tele. (310)973-3165</p>	<p>A community-wide discussion focused on establishing a Green Construction/Sustainable Construction Resource Center is underway.</p>
<p>Saddleback College 28000 Marguerite Pkwy Mission Viejo, CA 92692 Contact: Don E. Taylor Email: dtaylor@saddleback.cc.ca.us Tele. (949)582-4541</p>	<p>Environmental Studies Associate Degree Program includes courses in Alternative Energy Technologies and Natural Resource Conservation.</p>
<p>Goldenwest College 15744 Golden West Street Huntington Beach, CA 92647</p>	<p>Offers certificate programs in Environmental Studies. Courses include Solar Energy and Renewable Energy</p>

FACILITY/INSTITUTION	DESCRIPTION
Contact: Ted Palmer Email: tpalmer@gwc.cccd.edu Tele. 714-892-7711 x58289	Sources and Applications and Water Treatment.
De Anza College 21250 Stevens Creek Blvd Cupertino, CA 95014 Contact: Julie Phillips Email: phillipsjulie@deanza.edu Tele. (408)864-8655	Offers a program in “Energy Management and Climate Policy”.
Diablo Valley College 321 Golf Club Road Pleasant Hill, Ca 94523 Contact: Tom Chatagnier Email: tchatagnier@dvc.edu Tele. (925)685-1230, Ext.2522	Offers courses in Photovoltaic System Design and Installation. This is currently the only community college in California offering a NABCEP approved course.
Four Energy Email: www.fourenergy.org Tele. 1-888-804-4674	Four EWD initiatives partnering to develop courses: “Introduction to Energy Efficiency”, “Green Building” and “Green Construction”.
Skyline College 3300 College Drive San Bruno, CA 94066 Contact: Richard Soyombo Email: soyombo@smccd.edu Tele. (650)738-7098	CITD Center currently has a Regional Training Fund grant project focused on creating a program for Solar Panel Installers.
San Jose City College 2100 Moorpark Ave San Jose, CA 95128 Contact: Kathy Werle Email: sjcc.appliedscience@sjcc.edu Tele. (408)288-3781	Offers courses in: “Facilities Maintenance”, “Energy Conservation” and “Green Construction”.
Cabrillo College 6500 Soquel Drive Aptos, CA 95003 Contact: Scott Milrod Email: scmilrod@cabrillo.edu Tele. 831.477.5201 ext.1239	Offers an Associate Degree and Certificate programs in Construction and Energy Management.
Laney College 900 Fallon Street Oakland, CA 94607 Contact: Nick Kyriakopedi Email: nkyriakopedi@peralta.edu Tele. (510)464-3292	Offers a program in Environmental Control Technology and is funded by the National Science Foundation grant to review the program.

FACILITY/INSTITUTION	DESCRIPTION
<p>Merritt College 12500 Campus Drive Oakland, CA 94300 Contact: Merritt College Environmental Program Email: EcoMerritt@sbcglobal.net Tele. 510-434-3840</p>	<p>Offers courses in “Environmental Design” and “Energy Technology”.</p>
<p>Ohlone College Newark Center for Health Sciences and Technology 39399 Cherry Street Newark, CA 94560-4902 Contact: Dr. Ron Quinta Email: rquinta@ohlone.edu Tele. (510) 659-6024</p>	<p>LEED certified building that will teach environmental stewardship through responsible, sustainable practices.</p>
<p>Los Angeles Community College District 770 Wilshire Blvd. Los Angeles, CA 90017 Contact: Larry Eisenberg Executive Director, Facilities Planning and Development Email: EisenbLH@laccd.edu Tele. (213) 891-2366</p>	<p>Received the 2007 Governor’s Environmental and Economic Leadership Award for leadership in protecting the environment. LACCD is constructing over 40 LEED certified buildings, retrofitting existing buildings and plans to be “off the grid” by the end of 2008. It has also established a Sustainable Development Curriculum Committee.</p>
<p>Orange Coast College 2701 Fairview Road Costa Mesa, CA 92628-5005 Contact: Rose Anne Kings Email: rkings@ccd.edu Tele. (714) 432-5623</p>	<p>Incorporates green technologies and sustainability issues into Architectural Drafting and Design Courses.</p>
<p>Trade Technical College 400 West Washington Blvd. Los Angeles, CA Contact: Denise Fairchild Email: FairchDG@lattc.edu Tele. (213) 763-3761</p>	<p>Regional Economic Development Institute (REDI) is developing curricula in sustainable technologies.</p>