California green job programs at academic institutions

California boasts world-class educational institutions where students can learn valuable skills that prepare them to enter the workforce. Community colleges, trade schools, 4-year universities and graduate schools all offer excellent programs to individuals looking to learn about and advance in the green economy.

A sound education that gives an individual a specialized skill set can make it easier to be hired and promoted at the company of one's choosing. Surveys have shown that employers of the new green workforce are going to be looking for educational preparation in math, science and technology, in addition to good problem solving skills and hands-on training. In addition, just as in any other field, there will always be a need for individuals with advanced training, especially at the Master's level and higher.

4-YEAR COLLEGES, UNIVERSITIES AND GRADUATE SCHOOLS

Most, if not all, four-year colleges and universities offer a wide range of basic and advanced courses within bachelor's level and higher degree programs to prepare students for the green workforce. Environmental studies and science programs have been training workers in environmental resource management fields (including energy, waste and water) for decades, and coursework in chemistry, biology, engineering, math, geology and environmental science has continued to be a main emphasis of the required curriculum. For more information on these schools and the programs they offer, a large number of resources are available on the Internet, through career services offices at high schools and colleges, or by contacting the schools directly. Due to the breadth of such coursework offerings and the limited nature of this quidebook, academic programs at 4-year institutions are not included in the Guidebook.

TRADE SCHOOLS AND PROGRAMS

California is home to many specialty schools and institutions that offer coursework tailored to meet the requirements of a specific job class or field. These programs allow students the flexibility to complete a certificate or degree program in the field of their choosing. However, students may first want to identify the type of green job they desire and specifically tailor their concentration to meet the demands of that job.

2-YEAR COMMUNITY COLLEGES

The network of over 100 California community colleges offers a diverse array of low cost two-year degree and certificate programs to prepare students for green jobs. In addition to the traditional sciences, many two-year schools offer specialty degree programs and apprenticeship programs designed to fill specific green job niches. A list of all the California community colleges with identified specialty programs beyond the traditional sciences of chemistry, biology, math, physics, geography and geology is included on the following pages.

Green job educational programs at California community colleges

COMMUNITY COLLEGE	GREEN JOB PROGRAM CONCENTRATIONS - Apprenticeship program offerings in bold
Alameda	Automotive Technology, Diesel and Truck Mechanics, Green Job Apprenticeship Programs
Allan Hancock	Civil Engineering, Natural Science
American River	Ecology, Natural Resources, Green Diesel Technology, Geographic Information Systems, Green Job Apprenticeship Programs
Antelope Valley	HVAC (Heating, Ventilation and Air Conditioning), Geographic Information Systems
Bakersfield	Environmental Engineering, Environmental Science
Barstow	Natural Resources, Green Job Apprenticeship Programs
Berkeley City College	Biotech Program focus in Physical Sciences
Butte	Civil Engineering, Ecology, Environmental Science, Hydrological Sciences, Natural Resources
College of Canyons	Natural Resources
Cerritos	Natural Resources, Green Job Apprenticeship Programs
Cerro Coso	Natural Resources
Chabot	HVAC, Green Job Apprenticeship Programs
Chaffey	Earth Sciences, Green Job Apprenticeship Programs
Citrus	HVAC, Wastewater Engineering and Operations
Columbia	Environmental Science, Watershed Restoration, Geographic Information Systems
Contra Costa	Earth Sciences
Copper Mountain	Environmental Science
Cosumnes River	Civil Engineering, Environmental Engineering, Geographic Information Systems
Crafton Hills	Environmental Science
Cuesta	Environmental Science, Natural Resources, Green Job Apprenticeship Programs
Cuyamaca	Civil Engineering, Environmental Engineering, Environmental Science, Wastewater
Cypress	HVAC, Geographic Information Systems
De Anza	Ecology, Pollution Prevention
College of Desert	Ecology, HVAC, Environmental Science
Diablo Valley	Geographic Information Systems, Alternate Energy Technology program, Green Job Apprenticeship Programs
El Camino	Horticulture, HVAC, Environmental Science
Evergreen Valley	Civil Engineering
Feather River	Environmental Science, Natural Resources
Foothill	Horticulture, Environmental Science, Geographic Information Systems, Green Job Apprenticeship Programs
Fresno City	HVAC and Industrial Electronics, Green Job Apprenticeship Programs

COMMUNITY COLLEGE	GREEN JOB PROGRAM CONCENTRATIONS - Apprenticeship program offerings in bold
Fullerton	Environmental Technology, Environmental Science
Golden West	Environmental Technology
Grossmont	Hydrology
Imperial Valley	Industrial Electronics, Wastewater Engineering and Operations, Green Job Apprenticeship Programs
Laney	Architectural & Engineering Technology, HVAC and Refrigeration (Environmental Control Technician), Construction Management, Carpentry, Welding, Machine Technology, Physical Sciences, Electricity & Electronics, Green Job Apprenticeship Programs
Las Positas	Occupational Health And Safety
Long Beach City	Alternative Fuels, HVAC, Green Job Apprenticeship Programs
Los Angeles Pierce	Nursery Technician, Horticulture, Natural Resources, Green Job Apprenticeship Programs
Los Angeles Trade-Tech	Diesel Technology, Solid Waste Operations, HVAC, Wastewater Engineering and Operations, Geographic Information Systems, Green Job Apprenticeship Programs
Los Angeles Valley	Industrial Operations and Manufacturing, Earth Sciences
Los Angeles Medanos	Appliance Repair, Environmental Science, Green Job Apprenticeship Programs
Los Medanos College	Electrical and Electronic Technology, Environmental Science, Welding Technology, Physical Sciences
College of Marin	Civil Engineering, Environmental Landscaping, Natural Resources
Medocino	Horticulture, Earth Sciences, Natural Resources
Merced	Agricultural Science, Horticulture, HVAC, Natural Resources
Merritt	Green Building, Urban Farming Ecology, Horticulture, Environmental Restoration
Mira Costa	Radiation
Mission	Environmental Engineering
Modesto Junior	Horticulture, Environmental Engineer, Natural Resources, Industrial Systems Technician, Green Job Apprenticeship Programs
Moorpark	Civil Engineering, Environmental Engineer, Environmental Science
Mt. San Antonio	Industrial Electronics, HVAC, Water Distribution, Agricultural Power Equipment, Green Job Apprenticeship Programs
Mt. San Jacinto	Environmental Sciences, Wastewater Engineering and Operations, Geographic Information Systems
Napa Valley	Natural Resources
Ohlone	Natural Resources, Environmental Studies, Solar Photovoltaic Design and Installation [Future plans to add wind, biomass and nanotechnology design and installation]
Orange Coast	Civil Engineering, HVAC, Natural Resources, Machinist, Green Job Apprenticeship Programs
Oxnard	HVAC, Environmental Science
Palo Verde	Welding, Environmental Engineer, Automotive Technician
Palomar	Building, Welding, Carpentry, Wastewater Engineering and Operations, Automotive Technician, Sheet Metal, Green Job Apprenticeship Programs
Pasadena City	Building, Welding, Carpentry, Automotive Technician
Porterville	Agricultural Production
College of Redwoods	Metal Working

COMMUNITY COLLEGE	GREEN JOB PROGRAM CONCENTRATIONS - Apprenticeship program offerings in bold
Reedley	Metal Working, Horticulture, Mechanized Agriculture, Agricultural Technician, Automotive Technician
Rio Hondo	Building, Welding, Carpentry, Heavy Equipment, Environmental Technology, Automotive Technician, Green Job Apprenticeship Programs
Riverside City	Building, Welding, HVAC, Automated Systems Engineering
Sacramento City	Civil Engineering, Ecology, HVAC, Wastewater Engineering and Operations, Electric Vehicles Operation, Railroad Operations
Saddleback	Horticulture, Ecology, Automotive Technician, Construction Inspection, Geographic Information Systems
San Bernadino	Metal Working and Welding, HVAC, Wastewater Engineering and Operations, Automotive Technician, Green Job Apprenticeship Programs
San Diego City	Building, Welding, Carpentry, Plumbing, HVAC, Pipefitting Solar Turbines, Green Job Apprenticeship Programs
San Diego Mesa	Construction, Geographic Information Systems
San Diego Miramar	Heavy Equipment Operations
San Francisco City	Construction Management, Mechanical Engineering, Electrical Engineering
San Joaquin Delta	Building, Welding, Carpentry, Horticulture, HVAC, Wastewater Engineering and Operations, Natural Resources, Automotive Technician, Green Job Apprenticeship Programs
San Jose City	Building, Welding, Carpentry, HVAC, Machinist, Green Job Apprenticeship Programs
San Mateo	Building, Welding, Carpentry, Plumbing, HVAC, Construction, Metalworking, Green Job Apprenticeship Programs
Santa Ana	Welding, Automotive Technician
Santa Barbara City	Ecosystem Restoration, Horticulture, Green Job Apprenticeship Programs
Santa Rosa Junior	Sustainable Agriculture, Welding Diesel Technology, Geographic Information Systems, Green Job Apprenticeship Programs
Santiago Canyon	Public Works, Carpentry, Wastewater Engineering and Operations, Green Job Apprenticeship Programs
College of Sequoias	Construction, Welding, Carpentry, HVAC, Agricultural Power Equipment, Welding Industrial Maintenance, Green Job Apprenticeship Programs
Shasta	Civil Engineering, Horticulture, Forestry, Automotive Technician, Wastewater Engineering and Operations, Natural Resources, Agricultural Power Equipment, Welding, Industrial Operations
Sierra	Horticulture, Watershed Ecology, Construction, Metalworking, Geographic Information Systems
College of the Siskiyous	Welding
Solano CC	Horticulture, Hazardous Waste , Wastewater Engineering and Operations, Industrial Systems, Welding and Metalworking, Automotive Specialist
Southwestern	Building and Construction Trades, Environmental Management
Taft	Automotive Specialist
Ventura	Building and Construction Trades, Horticulture, Wastewater Engineering And Operations, Natural Resources, Green Job Apprenticeship Programs
Victor Valley	Building and Construction Trades, Horticulture, Green Job Apprenticeship Programs
W. Hills-Coalinga	Precision Agriculture
West Los Angeles	Power Plant Management and Operations
W. Valley	Geographic Information Systems
Yuba	Welding, Horticulture, Agriculture, Industrial Electricity, Hazardous Materials Management