



## **Sustainability: Solar and Green Building Projects**

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◆ Founded 1967

◆ 112 acres; 66 buildings; 116 classrooms/lecture halls; 43 labs



## **De Anza's 19-year Commitment to Sustainability and Environmentally Sound Building Practices**

**1992:** College Environmental Advisory Group (CEAG) was founded by Julie Phillips, Morgan Family Chair in Environmental Studies

**1994:** Foothill-De Anza adopted board policy on environmentally sound practices

**2000:** Green Building Design: De Anza embarked on a statewide leadership role by modeling all three of the college's new buildings to meet high standards of sustainable buildings (LEED certification)

**2001:** Sustainable Campuses: District-wide design standards for building construction, waste management, water usage, energy efficiency and material usage

**Fall 2004:** Science Center Complex opened (LEED certified)

**Summer 2005:** Student & Community Services Building opened (LEED certified)

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## **De Anza's 19-year Commitment to Sustainability and Environmentally Sound Building Practices - cont'd**

**Fall 2005:** Kirsch Center for Environmental Studies opened (LEED platinum)

**Fall 2007:** Dining Services re-opened using biodegradable food services products

**Spring 2008:** Custodians introduce "green cleaning"

**Summer 2008:** Phase I of the landscaping plan completed; native plants/weather station/artificial turf/irrigation system

**Fall 2008:** Revitalization of the recycling program

**Winter 2009:** Visual & Performing Arts Center opened (LEED Silver)

**2010:** Construction began on Mediated Learning Center (LEED Platinum)

**2011:** Applied for LEED Silver rating for renovation of Seminar and Multicultural Buildings

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## **Science Center Complex LEED Certified**

The Science Center complex is comprised of three buildings. Our science students are able to use the new facilities, which include chemistry, biology and computer labs, support areas, study rooms and a lecture hall.

The environmentally friendly facility uses natural daylight, natural air flow, and the most efficient heating, ventilation and air conditioning systems.



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## **Student & Community Services Building LEED Certified**

The two-story building provides an efficient, comfortable environment for students, community members and business representatives who want access to De Anza's programs and services. It features an attractive environment with plenty of natural light.



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## **Kirsch Center for Environmental Studies LEED Platinum**

The Kirsch Center is the lead demonstration building for energy innovation and sustainability in the California Community College system, rated as the first community college LEED platinum building in the nation.

Features include:

- Orientation and layout for energy efficiency and passive solar benefits
- Water conservation and water runoff control
- Solar panel roof
- Advanced natural ventilation
- Radiant heating and cooling
- Natural day-lighting
- Raised floor for gentle air distribution and flexibility
- Native species landscaping



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## **Visual & Performing Arts Center LEED Silver**

The state-of-the-art VPAC features adaptable and technologically advanced learning spaces, including indoor and outdoor classrooms, a 400-seat performance hall and the 2,000-square-foot Euphrat Museum of Art.



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## **Mediated Learning Center Designed as LEED Platinum**

Due to open in fall 2012, the MLC was designed to provide flexible general purpose classrooms and labs for increased instructional space and academic capacity for anthropology, sociology and world languages. This building won the 2010 Best Practice Award for the Energy Efficiency Partnership Program's Overall Sustainable Design.

### Key Features:

- Rooftop photovoltaic panels for electrical generation
- Rooftop solar hot water panels for building use
- Buoyancy driven ventilation
- Raised floor for gentle air distribution and flexibility
- High-performance skylight
- Clerestory windows
- Natural daylight
- Orientation and layout for energy efficiency and passive solar benefits
- Radiant heating in the lobby/atrium floor



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## **LEED Construction Projects Key Features**

- Reduced energy load
- On-site renewable energy
- Solar electric (photovoltaic)
- Natural daylight and ventilation
- Estimated to use 50% less energy than comparable buildings
- Auto faucet sinks
- Solar hot water
- Reduced emissions

De Anza's LEED-certified construction projects have:

- Lowered operating costs and increased asset value
- Reduced waste sent to landfills
- Reduced energy and water consumption
- Provided healthier, safer environments for occupants
- Reduced harmful greenhouse gas emissions
- Continued our commitment to environmental stewardship and social responsibility

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## Photovoltaic Arrays

Two photovoltaic arrays currently produce 125 kw/dc @ 156,350 kwh/yr power. A second set of photovoltaic arrays is scheduled for construction in summer 2011 and will produce 1 megw/dc power.

Kirsch Center for Environmental Sciences will also be the site of a third lab/ photovoltaic array. The Kirsch project will have three types of arrays: fixed panel, tracking, and roof shingle/pole mounted. Once the project is complete students will be able to perform system comparisons and gain hands-on educational experience in their classes. There is a kiosk monitor in the campus center that compiles the data from all the alternative energy sources across campus and displays the results.



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