Sustainable Design and Development – Certificate of Achievement

+If you have completed coursework at another college and/or are starting in a semester other than a Fall term, please follow up with the Counseling Department to determine if this sequence is appropriate for your academic and career goals.

Program Description: Sustainably designed (Green) buildings continue to be the fastest growing sector of the construction industry in the United States. This growth can be attributed, in part, to third-party voluntary certification systems such as LEED (Leadership in Energy and Environmental Design), which have gained tremendous momentum over the past decade. Similarly, the California Green Building Code (CALGreen), first adopted statewide in 2009, now mandates that a significant portion of commercial and residential construction in California be designed and constructed to meet a new range of sustainable and energy saving measures. In addition, post occupancy energy consumption mandated reviews are now required. Updated versions of the CALGreen code will be adopted by the state on a three-year cycle (http://www. bsc.ca.gov/Home/CALGreen.aspx).

The design and construction of Green Buildings address the following environmental issues:
• Climate change
• Resource depletion
• Water consumption
• Degradation of ecosystems/habitat
• Indoor environmental quality
• Occupant comfort and productivity

As a result of the rapidly growing market for green building sector certifications and code compliance documentation, educational resources must adapt to meet the needs of the marketplace and to keep pace with these new sustainable technologies and advancements.

This certificate provides training related to both CalGreen and LEED Certification, thus preparing students to sit for the LEED Green Associate Examination (LEED GA)

Program SLO: Students will be able to demonstrate the knowledge and skills required to work in the green building industry.

Important Information: For students interested in earning an Associate's degree and/or transfer, please follow up with the Counseling Office for additional information @ https://www.canyons.edu/counseling or (661)362-3288/(661)362-3811. For questions regarding the profession and discuss career goals, schedule an appointment with Jason Oliver, Department Chair (Jason.Oliver@canyons.edu).

*Major courses are sequenced and **BOLDED** based on recommendations by the Architecture Department.*

First Semester (2-11 units minimum)   FA = Fall; WI = Winter; SP = Spring; SU = Summer

Course	Title	Units	Major Courses
Group 1 Major Course	**Select one course from group 1, see table below**	**3**	**Major**
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Group 1 Major Course	**Select one course from group 1, see table below**	**2-3**	**Major**
	Term Total:	**11 -12**	

Second Semester (12-18.5 units minimum)

Course	Title	Units	Major Courses
ARCHT 085	Introduction to the LEED Rating System (SP)	0.5	Major
ARCHT 086	Project Site Factors (SP)	0.5	Major
ARCHT 087	Sustainable Materials and Indoor Environmental Quality (SP)	0.5	Major
ARCHT 088	Innovation in Design and Regional Priorities (SP)	0.5	Major
ARCHT 089	Green Building Economics (SP)	0.5	Major
ARCHT 090	LEED Online Documentation and Processing (SP)	0.5	Major
ARCHT 091	Green Building Control Systems and Resource Efficiency (SP)	1.0	Major
ARCHT 095	LEED Green Associate (GA) Test Preparation (SP)	0.5	Major
ARCHT 200A	Sustainable Development and Environmental Design (SP)	3	Major
	Term Total:	7.5	

Total Units: 18.5

Group 1 Major Courses: Select a minimum of 11 units from the following courses:

ARCHT 110	Architectural Drafting (FA, WI, SP, SU)	3
ARCHT 140	Materials and Methods of Construction (FA)	3
ARCHT 160	AutoCAD for Architecture and Interior Design (FA, SP, SU)	3
ARCHT 180	Codes and Zoning Regulations (SP)	3
ARCHT 200B	Design III - Environmental Design Lab (SP)	3
CONST 102	Construction Management Principles (FA)	3
CONST 103	Blue Print Reading for Construction (FA, SP)	3
CONST 105	Construction Estimating Principles (FA, SP)	3
CWE-186ID OR CWE188ID	Cooperative Work Experience Education Interior Design (Unpaid or Paid Internship) (FA, WI, SP, SU)	1-2
ID 110	Architectural Drafting (FA, WI, SP, SU)	3
ID 111	Kitchen and Bath Design (SP)	3
ID 113	Interior Design Materials and Specifications (FA)	3
SPAN 150	Beginning Conversational Spanish	3
WATER 120	Introduction to Water Systems Technology (FA, SP, SU)	3
WATER 132	Water Supply (FA, SP) (8 weeks 100% online)	3
WATER 135	Water Quality (FA, SP)	3

Counseling Resources

Architecture Department: https://www.canyons.edu/academics/architecture/index.php
Counseling Department: https://www.canyons.edu/studentservices/counseling/index.php
Campus Alliances: https://www.canyons.edu/administration/ie2/equity/alliances/index.php
Petition for Certificate of Achievement: Petitions are due in the fall/spring/summer term you will complete the requirements and may be submitted before your last term or up until the final day of the term. The petition form must be reviewed with a counselor and may be found here:
https://www.canyons.edu/studentservices/admissions/records/forms.php

Career Resources

Professional Association:
U.S Green Building Council, Los Angeles Chapter: www.usgbc-la.org
California Architects Board – Becoming a Licensed Architect:
https://www.cab.ca.gov/candidates/becoming_a_licensed_architect/
American Institute of Architecture Students: www.aias.org
American Institute of Architects, California Council (AIACC) http://www.aiacc.org/
National Architectural Accrediting Board: https://www.naab.org/

National Council of Architecture Registration Board: www.ncarb.org
Architecture Career Tree: https://www.canyons.edu/academics/architecture/careertree/index.php
California Career Zone: https://www.cacareerzone.org/
O*Net Online: https://www.onetonline.org/
Bureau of Labor and Statistics: www.bls.gov
Occupational Outlook Handbook: https://www.bls.gov/ooh/