

Green Buildings Certificate

This purpose of this certificate is to develop job skills and an understanding of green strategies for high-performance buildings and livable communities. It is focused at students and professionals in the fields of architecture; construction; building management; construction management; building inspection; design technology; landscape; and planning, who want to acquire a comprehensive knowledge of an integrated, economic life-cycle approach to the design of the built environment. It includes the study of green rating systems, material choices and environmental strategies for a livable, sustainable future.

Total Units: 18

First Year

Semester 1

9 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CMT 310 Materials of Construction	3	Advisory: CMT 300	F(O), S(O), Su (O)
6 units from List A	6	See List A	See List A

Semester 2 9 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
ARCH 342 Introduction to Green Buildings	3	S	
6 units from List A	6	See List A	See List A

[^]You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

List A-a minimum of 12 units from the following:

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
ARCH 332 Design Awareness	3	ARCH 320 & 321	F, S
ARCH 334 Advanced Design in Three Dimensions	3	ARCH 332	S
ADT 320 Architectural Design Technology - Building Information Modeling (BIM) I	3	Advisory: ADT 310	F, S
ADT 322 Architectural Design Technology - Building Information Modeling (BIM) II	3	ADT 320 or equivalent experience	F
BIT 150 California Energy Code – Building Energy Efficiency Standards	3		F(O)

Career Options/Outlook:

This certificate may complement other career options. Energy Auditors conduct energy audits of buildings, building systems, or process systems. They may also conduct investment grade audits of buildings or systems. Sustainability Directors help coordinate compliance with sustainable rating systems like the Living Building Challenge and LEED.

A sample of reported job titles:

Building Energy Consultant, Building Performance Consultant, Building Performance Specialist, Energy Auditor, Energy Consultant, Energy Rater, Home Energy Rater, Home Performance Consultant, Quality Assurance Supervisor, Residential Energy Auditor, Sustainability Director

Projected job openings in California (2020-2030):

14,300

Projected growth:

Decline -1% or lower

Median Salary in California (2021):

^{*(}O) = online available (P) = partially online

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
CONST 143 Solar Photovoltaic Systems	3		Check Class Schedule for offering
ECON 306 Environmental Economics	3	Advisory: MATH 120 or 125	F
GEOG 302 Environmental Studies & Sustainability	3		F, S
GEOG 305 C Global Climate Change	3		F(O), S(O)
GEOG 306 Weather and Climate	3	Advisory: MATH 30	Check Class Schedule for offering

At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the <u>ZTC page of the college website</u>.

Median wage: \$81,390yr

Source:

https://www.onetonline.org/link/summary/13 -1199.01

About this map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.

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