

Program Approval Application

College in Los Angeles and Orange County LAOCRC

Cerritos College
Citrus College
Coastline Community College
Cypress College
East Los Angeles College
El Camino College
Fullerton College
Glendale Community College
Golden West College
Irvine Valley College
Long Beach City College
Los Angeles City College
Los Angeles Harbor College
Los Angeles Mission College
Los Angeles Pierce College
Los Angeles Southwest College
Los Angeles Trade-Technical College
Los Angeles Valley College
Mt. San Antonio College
Orange Coast College
Pasadena College
Rio Hondo College
Saddleback College
Santa Ana College
Santa Monica College
Santiago Canyon College
West Los Angeles College

PROGRAM APPROVAL APPLICATION

Overview

The program approval process outlined by the California Community College Chancellor's Office requires that all requests to add new programs or certificates and/or to make substantial changes to any existing college's inventory of Career Technical Education (CTE) programs include a recommendation from the Regional Consortia. Instructions and the application form for the regional consortia recommendation are posted on our website at laocrc.org.

The process for obtaining a recommendation from the Regional Consortia is intended to inform and engage our region in creating programs for the Los Angeles and Orange County colleges, and to foster a spirit of collaboration and coordination that results in viable choices for Career Technical Education (CTE) courses/programs across the region.

The Los Angeles and Orange County Voting Members should submit **Requests for Program Approval** and **Notice of Intent (separate template available for Notice of Intent)** by the deadlines below:

Deadlines for application submissions (Program Approval and Notice of Intent)

Submission Deadline	LAOCRC Meeting Date
September 6, 2013	September 19, 2013
October 11, 2013	October 24, 2013 (CCCAOE October 23-25)
November 8, 2013	November 21, 2013
December 6, 2013	December 19, 2013
January 3, 2014	January 16, 2014
February 7, 2014	February 20, 2014
February 28, 2014	March 13, 2014 (CCCAOE March 12-14)
April 4, 2014	April 17, 2014
May 2, 2014	May 15, 2014
June 6, 2014	June 19, 2014

PROGRAM APPROVAL APPLICATION
NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED
(This application may not exceed 3 pages)

Fill In Form

High Performance Building Operation Management

Proposed Program Title

Santa Ana College

College

Rancho Santiago Community College District

District

Fall 2015

Projected Program Start Date

Bart Hoffman

Voting Member

Dean, Career Education and Workforce
Development

Title

714-564-6800

Phone Number

hoffman_bart@sac.edu

E-mail Address

Goal(s) of Program (Check all that apply):

Career Technical Education (CTE)

Transfer

Other

Type of Program (Check all that apply):

A.S. Degree

A.A. Degree

Certificate of Achievement:

18+ semester (or 27+ quarter) units

12-18 semester (or 18-27 quarter) units

Reason for Approval Request: (Check One)

New Program

Substantial Change

Locally Approved

Program Information

Recommended Taxonomy of Program (TOP) Code 0946.10

Units for Major-Degree 22-23

Total Units for Degree 60-70

Required Units-Certificate 22

Written Form

1. Insert the description of the program as it will appear in the catalog.

The Associate of Science degree and certificate programs in High Performance Building Operation Management are focused towards career technical education training of students in sustainable methods for improving the operational performance of offices, schools, hospitals, and other residential and commercial buildings while working as Building Commissioning Professionals, Operations Professionals, Facility Managers and supporting positions. These programs will provide needed skilled and qualified workers, particularly as building technologies become more advanced.

2. Provide a brief rationale for the program.

This is a cost-effective, innovative program that is responsive to the diverse needs and interests of our students. Courses in this program may also prepare students for transfer to the CSULB Civil Engineering and Construction Management B.S. degree program and Cal Poly Construction Management B.S. degree program. Most courses in this program of study not only transfer, but may also be articulated if the four year colleges agree to do so. It is in lock-step with California and Federal government programs such as The U.S. Department of Energy Better Buildings Workforce projects and with nearby four year program training. Labor market data demonstrates significant growth of jobs for Facilities Managers and Construction Management within the region the college proposes to serve with the degree. Engineering Trade Advisory meeting minutes for 2011, 2012 and 2013 included discussions about the data and need for this valuable degree program. According to the Orange County Workforce Indicators Report <http://ocwib.org/civicax/filebank/blobdload.aspx?BlobID=30489>, page 40 notes that, "Many Orange County companies have adjusted their operations to include new environmentally sustainable practices in light of recent state and federal legislation, but in doing so have discovered many cost-saving and performance-enhancing side effects that have made Green Technology practices more than altruistic — they simply make good business sense. Orange County's overall job growth of 15 percent was the third largest growth rate in California, behind the Sacramento region (113 percent) and the San Francisco Bay Area (78 percent). The clusters with the greatest employment totals in Green Technology for 2012 included Business and Professional Services, Advanced Manufacturing and Construction — a split emphasis in producing environmentally-conscious products and applying concepts at a strategic level via consulting services." People are going back to work, and topping the growth is Service employment, the sector Facilities Managers belong to.

3. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (Push Enter after each entry to begin a new line)

Courses	Course No.	Course Title	Units
Introduction to Architecture/Civil Engineering/Construction (AEC)	ENGR 100B	Required Core for both degree and cert	2
Architecture/Civil Engineering/Construction (AEC) Drafting Standards	ENGR 142	Required Core for both degree and cert	4
Fundamentals of Construction Engineering/Construction (AEC) Drafting	ENGR 143	Required Core for both degree and cert	3

Standards			
Architectural Practice	ENGR 201	Required Core for both degree and cert	4
Cost Accounting for Construction Engineering	ENGR 202*	Required Core for both degree and cert	3
Sustainable Construction and Facilities Management	ENGR 203	Required Core for both degree and cert	3
Statics	ENGR 235	Required Core for degree only	3
Society and the Built Environment	ENGR 112	Required Core for certificate only	3
Cost Accounting for Construction Engineering	ACCT 202	*Alternate for both degree and cert	3
Financial Accounting	ACCT 101	*Alternate for degree only	4
Pre-Calculus Mathematics	MATH 170	Prerequisite	4
Analytic Geometry and Calculus I	MATH 180	Prerequisite	4
Analytic Geometry and Calculus II	MATH 185	Prerequisite	4

- Summarize the Labor Market Information and employment outlook (including citation of the source of the data) for students exiting the program.

Source: Employment Development Department, Labor Market Information Division

<http://www.labormarketinfo.edd.ca.gov/>

High Performance Building Operation Managers does not come up directly as an occupational title; however, the above referenced occupations (Administrative Service Managers, General and Operations Managers, and Construction Managers) are the closest matches. According to the Labor Market Information of Estimated Employment and Projected Growth for the various types of employment available for students completing this program, there are 21,490 projected openings in Los Angeles County and 6,800 projected openings in Orange County over a ten year period (2010-2020). The average number of combined yearly job openings for Los Angeles and Orange counties for the various types of employment available for students with this degree is estimated to be 2829. While reviewing the Chancellor’s Office Data Mart for historical completion rates for the community colleges in Los Angeles and Orange counties, the highest number of completions over the past three years for programs with a TOP code of 0946.10 Energy Systems Technology was 55 (2012-2013). Therefore, 2829 minus 55 would still result in a Net Annual Labor Demand of 2774 jobs.

- List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (Push Enter after each entry to begin a new line)

College	Program	Who you Contacted	Outcome of Contact
Orange Coast College	Architectural Technology:	Doug Benoit, Dean for	No concerns about proposal
LA Valley College	Sustainable Design, CA Sustainable Construction Management AS degree	Business, Computing, Tech. Laurie Nalepa, Dean CTE	No concerns—not geographically close enough

- Include any other information you would like to share.

N/A