Environmental and Facilities Management Certificate Program

Accelerate Your Career

ce.uci.edu/facilities
Improve Your Career Options with a Professional Certificate

UCI Division of Continuing Education’s professional certificate and specialized studies programs help you increase or enhance your current skills or prepare for a new career. Courses are highly practical and instructors are qualified leaders in their field. Convenient online courses make it easy to learn on your own time, in your own way. A certificate bearing the UC seal signifies a well-known, uncompromising standard of excellence.

Facilities Management Certificate Program
Facility management is the practice of coordinating the physical work environment with the people and work of an organization. This discipline integrates the principles of business administration, architecture, and the behavioral and engineering sciences.

This certificate program furthers the understanding of this diverse field with an innovative series of courses focusing on design and management of facilities, from concept to installation, to long-term efficient use.
Who Should Enroll
- Individuals who desire to enter the facilities management profession
- Professionals who are involved in the design or management of facilities, building operations, maintenance operations, construction, or occupational safety
- Facilities professionals who wish to increase their knowledge in specific areas in preparation for the IFMA Certified Facility Manager (CFM) examination

Program Benefits
- Broaden your skills and knowledge of all areas relating to facilities management
- Obtain valuable insight about the impact of technology on the management and design of efficient facilities
- Gain knowledge to help prepare for credential exams such as the IFMA Certified Facility Manager (CFM)

Certificate Eligibility and Requirements
A certificate is awarded upon completion of 18 credit units (9 required and 9 elective credit units) with a grade of "C" or better in each course.

To become an official candidate in the program, students pursuing the certificate must submit a Declaration of Candidacy. To receive the certificate after completing all program requirements, students must submit a Request for Certificate. All requirements must be completed within 5 years after the student enrolls in his/her first course. Students not pursuing the certificate program are welcome to take as many individual courses as they wish.

Program Fees
The total cost of the program varies depending on the electives chosen. Actual fees may differ from the estimate below. Fees are subject to change without prior notice.

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Fees</td>
<td>$4,475</td>
</tr>
<tr>
<td>Candidacy Fee</td>
<td>$125</td>
</tr>
<tr>
<td>Textbooks and Materials</td>
<td>$636</td>
</tr>
<tr>
<td>Total Estimated Cost</td>
<td>$5,236</td>
</tr>
</tbody>
</table>

IFMA members receive a 10% discount.*

Prepare yourself for Industry Certification
UCI Continuing Education's Facilities Management Certificate Program has been designed and approved based on the body of knowledge consistent with IFMA's underlying principles on facility management. After completing this program you will be prepared to sit for the Certified Facility Manager (CFM) designation available directly through IFMA, which recognizes competency-based certification in all areas of FM.

Please visit the International Facility Management Association (IFMA) at www.IFMA.org and the IFMA Orange County Chapter at www.IFMAOC.org for more information.

Corporate Training
Our Corporate Training specialists can deliver this program or a customized one that fits your company's specific needs. Visit ce.uci.edu/corporate or call (949) 824-1847 for information.

For more information:
Jennifer Mortensen
(949) 824-9722
j.mortensen@uci.edu
Required Courses (9 units)

Fundamentals of Facilities Management
SOCECOL X499 (3 units)
Increase your understanding of facilities management with an overview of the principle duties of a facility manager. Learn the practical applications that will help you understand the business aspects of facilities management. Gain an understanding of the diverse responsibilities and decision-making processes from building infrastructure to fleet services. Acquire the insight needed to meet budget restraints while improving productivity, efficiency, and employee quality of life issues.

Facilities Design and Space Planning
SOCECOL X499.1 (3 units)
Master the successful applications of facilities design including defining the requirements of a project, developing design strategies, implementing corporate philosophies and methodologies, and understanding the project development process. Gain the knowledge that will help you increase your confidence as a project leader and assure the success of your future projects. Whether you are managing multiple, small departmental relocations or anticipating a large project, these professional skills will assure you of greater success.

Leadership for Facilities Professionals
MGMT X442.7 (3 units)
Facilities managers manage both facilities operations and personnel. Gain practical knowledge that can be used on the job to enhance your leadership skills and improve productivity. Explore topics that include: a supervisor’s role within an organization, verbal and written communication skills, problem-solving techniques, managing a budget, strategic planning, ethics, and team development. If you supervise or manage within a facilities management organization or in an environment where technical, professional, or trades people are working, this course is for you.

Elective Courses (Minimum 9 units)

Principles of Heating, Ventilation, Air Conditioning (HVAC)
ENGRMAE X429.1 (3 units)
Gain practical knowledge on heating, ventilation, air-conditioning and refrigeration systems as applied to building comfort systems. Enhance your knowledge of all aspects of HVAC-R systems. Explore topics that include: thermodynamics, psychrometrics, forced air and hydronic heating systems, LEED certification levels, and current issues regarding building sustainability. Facilities managers, building engineers, and maintenance and service mechanics will find this course of interest.

Financial Analysis for Facility Professionals
MGMT X494.8 (3 units)
Financial management skills are a must have in a facilities management career in our current economic environment. This course will not only guide you through the basic terminologies and tools, it will enhance all the talents you currently bring while educating you thoroughly to perform financial analysis with a facility management twist. You will reap the benefits of being able to comprehend and perform financial analysis through practical experience with real life financial analysis scenarios. Acquire the skills that can help you reason, process, develop, and present both an operating and capital budget along with analysis to help you sell your projects, such as: Payback, Life-Cycle Costing, Return on Investment (ROI), Return on Assets (ROA), Net Present Value (NPV), and Present Value (PV). You will also explore alternative financial analysis strategies to assist in establishing cost effective practices.

Construction Contract Documents for Facilities Management
ENG X441.1 (1.5 units)
Learn to understand and utilize construction documents and related contract information for better facility management. Apply document information for administrating change and improvements of the facilities including: design drawings, dimensioning, symbols, abbreviations, and similar graphic applications. Analyze different kinds of facility drawings, specifications and related contract form-work. Effective use of these document tools offers greater contract clarity while enhancing the long-term management of the facility.

Building, Occupational, and Environmental Codes for Facilities Managers
ENG X441 (3 units)
Learn to be code conscious and conversant with respects to the facilities that you manage. Through interactive participation with classmates and code experts, you’ll be introduced to regulatory requirements affecting operations and management of the facilities. This course offers a breadth of code applications ranging from occupancy and accessibility to OSHA and environmental regulations. Because this course orients primarily to facility management, you will learn to recognize areas of code deficiency and/or risks as well as the “best practices” for managing/ remediation of code conflicts.

ce.uci.edu/facilities
Principles of Emergency Management
SOCXCOL X490 (3 units)
All-hazards disaster planning and preparedness is the foundation for a coordinated, timely, and well-executed disaster response that applies to a broad range of events. Get an overview of emergency management with a focus on the roles of local, county, state, and federal government; non-profit agencies; and the business community. Gain an understanding of the key principles of emergency management within the framework of mitigation, preparedness, response, and recovery. Enhance your knowledge of risk and threat assessments, preparing emergency plans, managing response, and developing and implementing recovery plans. Learn about the regulations and standards that govern emergency management, such as SEMS, NIMS, and NFPA 1600. The principles of emergency management are reinforced with lessons learned from real-life events, and guest experts augment the learning experience.

Introduction to Communications and Networking
EECS X490 (3 units)
Increase your knowledge of the basic principles of data communications. This course provides a comprehensive overview of the following topics: analog and digital transmission, voice, video and data processing, open systems interconnect (OSI) model, client-server architectures, bridges and routers, local area and wide area networks, and modern state-of-the-art technologies. An introduction to Ethernet, TCP/IP, other high-speed protocols, broadband communications, and wireless communications is also presented. Participants actively learn through case studies that provide “real-world” scenarios of modern data communication systems.

Managing Indoor Air Quality
SOCXCOL X498.38 (3 units)
People spend 90% of their time indoors. In order to protect their safety and health, it is crucial to protect the indoor air quality (IAQ) through facility design and management. This course is therefore designed to examine the threat posed to the indoor air quality in schools, work places and office buildings. Participants will list various factors that contribute to poor indoor air quality. Participants will also gain a deeper understanding regarding the relation between indoor air quality and energy efficiency. The course addresses the role of indoor air quality in green building design and sustainability. Leadership in Energy and Environmental Design (LEED) requirements related to indoor air quality will be reviewed. In addition, the role of mechanical ventilation systems in causing indoor air quality problems and the resolution of those problems will be discussed. The course will explore the sources of indoor air pollutants, “sick building syndrome”, mold and, indoor air quality program management and regulatory requirements.
Advisory Committee

- Mike Darger, CFM, VP, Corporate & Restaurant Facilities, CKE Restaurants, Inc.
- Paul Howland, MBA, Principal, Steam Plant Training & Consulting
- Subodh A. Kumar, IFMA Fellow, President, Chartered Facility Management Group, Inc.
- DeBorah J. Lozada, CBCP, Associate Director, Disaster Recovery, FOX Entertainment Group
- Phyllis Meng, CFM, SFP, IFMA Fellow; Principal, Meng Associates
- John D. Secor, Principal Architect, Archetype International
- Bill Wostenberg, CBCP, National Manager, Business Continuity Management Office at Kia Motors America

Academic Management

Dave Dimas, Ph.D., Director, Engineering, Sciences and Information Technologies

Facilities Management Certificate Program

UCI Division of Continuing Education

Jennifer Mortensen ■ (949) 824-9722 ■ j.mortensen@uci.edu

ce.uci.edu/facilities