

# REAL ESTATE FACILITY MANAGEMENT (REFM1-CE)

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## **REFM1-CE 9032 The Business of Facility Management (2 Credits)**

Examine the roles of facility management professionals whose mission is to provide and maintain corporate and institutional real estate assets and work space. Topics include the facility management mission in relation to an organization's strategic plan, common organizational models, an overview of workplace strategies, operational management, financial forecasting and management, capital and operating budgets, life-cycle costing, general administrative services, technology, the building of a security force, communications, and leadership.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## **REFM1-CE 9047 Facilities Planning and Project Management (2 Credits)**

Learn the skills needed to manage a facility-based project while dealing with the corporate organization and its financial constraints. Topics include planning for renovations, relocation, and new construction; financial forecasts and budgeting; feasibility studies and programming; space planning; space and furniture standards; space allocation; legal and regulatory issues; evaluation and hiring of consultants; design development; contract documents; engineering; bidding; scheduling; furniture and construction management; and move-in procedures.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## **REFM1-CE 9050 Facilities Operations and Maintenance (0 Credits)**

Learn the key attributes of an effective, high-performance facilities management (FM) organization and the best ways to develop a robust FM operations and maintenance plan. Topics include analyzing and measuring current services and processes; comparing your services with "best-in-class" processes and practices; developing an effective maintenance program, including preventive, predictive, and reliability-based maintenance processes; and optimizing FM organizational constructs—and the related operational improvement plans—including performance and organizational gap analysis. Discuss in-house versus outsourced evaluation and the key metrics and KPIs necessary to measure and track operational performance. The course also covers integrating sustainability practices and processes into FM cultures, expanding FM influence within a company, becoming a better partner and collaborator with customers and service providers, and enhancing teamwork and communication internal and external to the FM organization.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## **REFM1-CE 9060 Energy Management and Sustainability (0 Credits)**

Learn how facilities management organizations develop and implement sustainability and energy management processes, best practices, and programs to optimize delivered value across the business enterprise. Topics include the key attributes of robust, successful sustainability/energy management programs; operations and maintenance best practices; energy master plan development; energy/carbon performance metrics and key performance indicators; change management processes; energy/sustainability communication and awareness programs; and internal and external partnerships, alliances, and collaborations. This course also covers the optimization of operational performance within a framework of cost, performance, reliability, and the quintuple bottom line—economic, social, environmental, technological, and political.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## **REFM1-CE 9595 Mission Critical Systems Design, Operation, and Maintenance (0 Credits)**

Examine the mission critical systems and equipment designed to protect and maintain electrical, mechanical, and digital operations in a 24/7 business operations facility. Special focus is given to facilities with data centers, trading floors, and other significant information technology. Topics include energy conservation, automatic transfer switches, static transfer switches, standby generators and fuel systems, uninterruptible power supply and batteries, raised floor applications, cooling strategies, and maintenance and testing. Critical system industry concerns, trends, and strategies are also discussed.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

## **REFM1-CE 9596 Sustainability and Facilities Management Optimization (0 Credits)**

Today's business enterprises require a customer-focused culture that emphasizes employee productivity and innovation supported by flexible, adaptable, responsive, and cost-effective facilities. Learn how facilities management (FM) groups optimize delivered value within a framework of sustainability across the enterprise—and become key internal consultants, strategists, and process-focused leaders for the business. Learn the key attributes required of a highly effective FM organization, including optimizing business processes to eliminate non-value-adding activities and the allocation of resources, expanding influence and initiatives both upstream and downstream, establishing and maintaining robust partnerships and alliances, fostering external and internal teamwork, and enhancing performance and focus on total cost to the organization. The critical viewpoints of senior leadership, customers, employees, and stakeholders are addressed as we cover the sustainability quintuple bottom line—from economic, social, environmental, technological, and political perspectives.

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes

**REFM1-CE 9598 Building Commissioning (0 Credits)**

Learn how a quality commissioning process can help bridge the gap between design, construction, and operations for today's new generation of high-performance buildings. Using an integrated building design methodology, learn how to apply the commissioning process from early pre-design to construction and post-occupancy. Topics covered include the purpose of building commissioning, the Owner's Project Requirements (OPR), the Basis of Design (BOD), the roles and responsibilities of project participants, and LEED certification requirements for commissioning. Discuss how to implement integrated building design methodology and to pursue commissioning for new construction and existing buildings (retro-commissioning).

**Grading:** SPS Non-Credit Graded

**Repeatable for additional credit:** Yes