

## **FACILITY & SUSTAINABLE BUILDING MANAGEMENT COURSE DESCRIPTIONS**

### **Effective September 2020 (Required Courses Only)**

#### **Certificate of Achievement (COA)**

BUS 56- Human Relations in the Workplace- (5 Units- 60 Hours Lecture)-Human relations behavior in organizations emphasizing personal and interpersonal relationships. Examination of motivation, communication skills, leadership skills, emotional and physical wellness, diversity, and ethical behavior for promoting effectiveness on the job.

BUS 65- Leadership- (5 Units- 60 Hours Lecture)-The purpose of this course is to introduce the student to the challenges of leadership. The student will learn different techniques to build successful relationships in a culturally diverse world. The ultimate goal is to develop effectiveness in leadership situations. This multimedia online course uses video to help students analyze and evaluate different leadership styles

BUS 85-Business Communication- (5 Units- 60 Hours Lecture)-Application of writing skills to business communications; public relations functions of business correspondence.

ES 58- Introduction to Green Buildings- (1 unit- 12 Hours Lecture)- An overview of strategies to implement a green building project within your organization. The strategies include model green building policy and guidelines including, sustainability principles, passive solar design, assembling a green team, assessing the impact of construction and buildings on society, and an overview of key stakeholders in the construction field.

ES 69A- Introduction to Facilities Management (3 Units- 36 Hours Lecture)-This course will introduce key concepts of Facility Management that range from the role the facility manager plays in the organization to the skill sets and competencies required to effectively perform the job. This course will give the facility manager a greater appreciation for what they manage in the workplace and the typical challenges they face on a daily basis.

ES 70- Introduction to Energy- (1 Unit- 12 Hours Lecture)-Provides a general overview of the field of Energy Management and its importance to society at all levels. In particular, the evaluation, operation, and maintenance of energy systems in residential and small commercial buildings will be looked at, including alternative and renewable energy sources, in order to improve efficiency, reduce costs, and minimize environmental impacts.

ES 71- Introduction to Sustainable Buildings (1 Unit- 12 Hours Lecture) - Presents a general overview of Energy Efficient Buildings with an emphasis on residential and small commercial buildings. Specific topics to be covered include: energy use in buildings, bio-climatic design, energy basics, heat transfer concepts, whole building thermal analysis, as well as other important building energy efficient issues.

ES 78- Introduction to Energy Management Systems and Controls (1 Unit- 12 Hours Lecture)- Describes the most commonly used controls and energy management systems in commercial and

institutional applications. Topics will include complex automatic systems for major energy-consuming equipment, as well as simple controls, including time clocks, occupancy sensors, photocells, and programmable thermostats. Computer-based energy management systems, as well as control systems to reduce peak electrical demand will be discussed.

ES 82-Project Management and Technical Report Writing- (2 Units- 18 Hours Lecture; 6 Hours Lab)- This course is focused on effective program and project management and writing compelling and accurate technical reports of audit findings for a non-technical audience. Course covers elements, formats, templates, structure, and graphics to support findings and to build a compelling and winning proposal.

### **Certificate of Achievement- Advanced (COA-A)**

ACCT 1A- Financial Accounting I (5 Units- 60 Hours Lecture) -The primary objective of this course is to help students learn how accounting meets the information needs of various users by developing and communicating information that is used in decision-making. Accordingly, the expected student outcome is the demonstration that the student can read, analyze and interpret external financial statements.

BUS 10- Introduction to Business (5 Units- 60 Hours Lecture)- An overview of the forces within the business environment (i.e., globalization, economics, government, technology and society), and an introduction to the key functional areas within the firm, such as marketing, operations, accounting, finance, management and human resources.

ES 81- Leadership in Energy and Environmental Design/Building Codes (2 Units, 24 Hours Lecture)-This introductory course is designed for students and employees seeking to learn more about green building and how it can benefit their company. Topics covered will include the triple bottom line of sustainability, current market trends in green building, the Building Energy Code (Title 24, section 6), Appliance Code (Title 20), and the Green Building Code (Title 24, section 11). The class will include modules on simulation tools that can be used for code compliance, analysis of the potential impact for specific EE and DR measures, verification of energy savings efforts, and the process of greening existing energy portfolios.

ES 83- Energy Management ROI (2 Units, 48 Hours Lecture)- An overview of utility rate types and charges and exploration of building energy benchmarking tools such as Energy Star Portfolio Manager and LBNL's Energy IQ. Methods for estimating costs, and calculating the financial benefits of recommended energy efficiency and renewable energy projects and determining the return on investment and cost benefits of energy efficiency changes in commercial and residential buildings will be analyzed.