

Master Energy Manager (MEM) Certification Course Syllabus

Course Overview

The Master Energy Manager (MEM) Certification Course is an advanced program designed for experienced energy professionals seeking to elevate their strategic leadership in energy and sustainability management. Building upon foundational knowledge from the Accredited Energy Manager (AEM) certification and the Foundations of Planning course, this program delves into the sophisticated processes of developing, implementing, and continually optimizing comprehensive energy and sustainability master plans within an organizational context. Participants will gain the tools and insights necessary to drive significant energy cost reductions, enhance operational efficiency, and champion long-term sustainability initiatives.

Learning Objectives

Upon successful completion of this course, participants will be able to:

- Develop and assess a comprehensive energy management program.
- Formulate and implement a strategic Energy/Sustainability Management Master Plan.
- Establish and maintain accurate energy information databases for effective analysis and benchmarking.
- Conduct advanced energy analysis, including behavioral modification, EMCS analysis, and procurement strategies.
- Design and manage an evolving energy program, including project prioritization and financing.
- Apply Measurement & Verification (M&V) processes to validate energy savings.
- Integrate energy management principles into organizational culture and budgeting.

Target Audience

This course is intended for energy managers, facility managers, engineers, sustainability professionals, and other individuals with foundational knowledge in energy management who are responsible for strategic energy planning and implementation within their organizations.

Course Format

This is an online, self-paced course structured into six modules, each containing multiple lessons. The course incorporates knowledge checks, exercises, and deliverables designed to reinforce learning and apply concepts to real-world scenarios, as the participant develops a robust energy master plan.

Assessment and Deliverables

Your performance in this course will be evaluated based on the completion of online Knowledge Building questions for each section, practical exercises, and a final certification process. The final exam entails the completion and presentation of a fully developed Energy Master Plan.

Pre-Requisites

AEM Certification and Foundations of Planning (MEM course registration and exam registration are separate)

Professional Development Hours

22 PDH credits, upon completion and approval of plan

Course Modules and Lessons

MODULE 1: INTRODUCTION & COURSE OVERVIEW

- Lesson 1: Course Expectations
- Lesson 2: Meet the Instructors / Reviewers
- Lesson 3: Info on Rubric and Deliverables
- Lesson 4: Discussion of Items / Info Needed
- Lesson 5: Energy Management Program Assessment

MODULE 2: PROGRAM DEVELOPMENT

- Lesson 1: Energy Management Process
- Lesson 2: Energy Department Tasks and Organization Introduction
- Lesson 3: Energy Department Tasks Breakdown
- Lesson 4: Energy Management Policy
- Lesson 5: Energy Management Guidelines
- Lesson 6: Energy Management Plan

MODULE 3: INFORMATION DATABASE

- Lesson 1: Organizing an Accurate Information Database
- Lesson 2: Campus / Facility Descriptions & Assessments
- Lesson 3: Utility Data Analysis
- Lesson 4: Facility Benchmarking
- Lesson 5: Equipment Inventory
- Lesson 6: *Work Order History*

MODULE 4: CONTINUING ANALYSIS

- Lesson 1: Providing a Methodology
- Lesson 2: Energy Survey Reporting
- Lesson 3: Behavioral Modification Programs
- Lesson 4: Communication
- Lesson 5: EMCS Analysis
- Lesson 6: Maintenance / Custodial Best Practices
- Lesson 7: Procurement
- Lesson 8: Design Specification Upgrade

MODULE 5: EVOLVING PROGRAM

- Lesson 1: Producing an Evolving Program
- Lesson 2: Replacement Project Prioritization
- Lesson 3: Financing the Program
- Lesson 4: Measurement & Verification Process

MODULE 6: FINAL CERTIFICATION PROCESS & COURSE SUMMARY