Certified Energy Auditing Professional (CEAP) Workshop

Days: **4 Days** | Course Fee: **USD 1,800**

Course Description

The Certified Energy Auditing Professional (CEAP) Training Program is a comprehensive, industry-aligned certification course designed to equip professionals with the expertise to conduct rigorous energy audits, develop data-driven energy strategies, and implement sustainable solutions across diverse sectors. with 12 core modules, the program blends theoretical knowledge with practical skills—covering everything from audit planning and energy analysis to technical system optimization and economic justification. Aligned with global standards (e.g., ISO 50001, ASHRAE 211), this course prepares participants to lead energy-efficiency initiatives, reduce operational costs, and meet compliance requirements.

What You Will Learn

By completing this program, you will learn:

1 Audit Lifecycle knowledge

- Plan end-to-end energy audits, define project scopes, assemble cross-functional teams, and communicate findings to stakeholders.
- Draft professional audit reports and support ISO 50001 Energy Management System implementation.

2 Data-Driven Energy Analysis

- Establish utility baselines, analyze energy usage patterns, and benchmark performance against industry standards
- Use statistical methods (e.g., regression analysis) and tools to identify savings opportunities.

3 Technical System Expertise

Audit and optimize critical systems:

- Lighting: Evaluate efficacy, calculate power density, and recommend efficiency upgrades.
- HVAC/Heating/Ventilation: Assess equipment efficiency, control strategies, and maintenance practices.
- Motors/Compressed Air: Analyze motor performance, compressed air leaks, and variable frequency drive (VFD) applications.
- Building Envelope: Evaluate insulation, air infiltration, and window efficiency.

- Automation & Controls: Interpret sensor data, trend logs, and optimize building management systems (BMS).

4 Economic Viability Assessment

- Conduct financial analyses (NPV, IRR, LCCA) to justify energy projects and demonstrate ROI to decision-makers.
- Perform sensitivity analysis and scenario planning for long-term project success.

5 Specialized Capabilities

- Evaluate alternative energy technologies (renewables, storage) and transportation energy efficiency (fuel optimization, route planning).
- Integrate water conservation and waste reduction strategies into energy audits.

Who Should Attend?

This program is tailored for professionals seeking to advance their careers in energy management and auditing, including:

- **Engineers:** Mechanical, electrical engineers specializing in energy efficiency.
- **Facility Managers:** Responsible for reducing energy costs in commercial, or institutional buildings.
- **Consultants & Advisors:** Energy consultants, sustainability experts, and business advisors expanding service offerings.
- **Corporate Sustainability Leaders:** tasked with developing organizational energy management programs.
- **Government/NGO Professionals:** Involved in energy policy, regulatory compliance, or public sector efficiency initiatives.
- **Industry Specialists:** Professionals in manufacturing, real estate, hospitality, or transportation optimizing energy-intensive operations.

Whether you're new to energy auditing or looking to validate your expertise, this program provides the credentials and skills to lead impactful energy transformations

Course Modules

Course Content (Teaching Modules)

Module 1:	Introduction to Energy, Energy Audits
Module 2:	Energy Audit Strategy and Plan, Energy Use Analysis
Module 3:	Data Collection and Analysis
Module 4:	Economic Analysis
Module 5:	Building Envelope
Module 6:	Heating Ventilation and Air Conditioning Systems
Module 7:	Lighting Systems
Module 8:	Domestic Hot Water Systems
Module 9:	Motors & Drives
Module 10:	Compressed Air Systems
Module 11:	Building Automation Systems, Energy Management & Control Systems
Module 12:	Alternative Generation & Storage
Module 12:	Transport