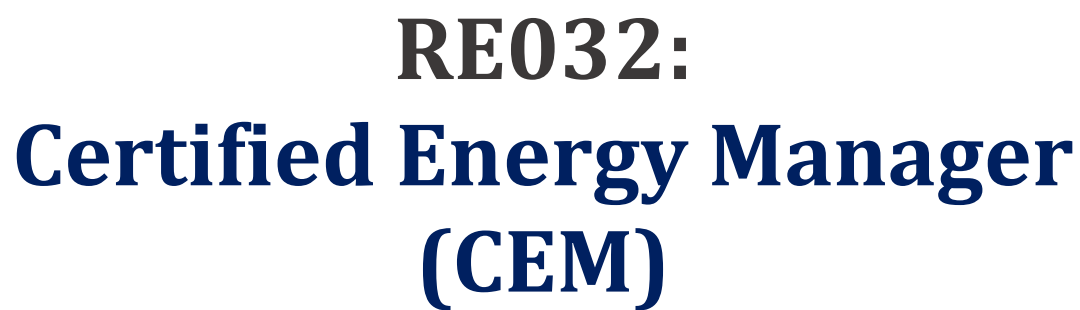




Training Description:

The Certified Energy Manager (CEM) training course is a rigorous, professional-level course designed to equip energy professionals, facility managers, engineers, and sustainability leaders with the knowledge, skills and tools required to optimize energy performance across buildings, industrial facilities, and processes. The training course provides an in-depth understanding of energy auditing, energy efficiency, renewable energy integration, financial analysis and sustainable energy management practices. Participants will gain practical insights into energy conservation opportunities, regulatory compliance and advanced energy management strategies, preparing them to earn the globally recognized CEM certification.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Understand the principles of energy management and conservation
- ✓ Conduct detailed energy audits and identify energy-saving opportunities
- ✓ Analyze energy consumption, costs and efficiency in various systems
- ✓ Develop strategies for optimizing energy use in buildings, industrial processes and utilities
- ✓ Evaluate renewable energy technologies and their economic feasibility
- ✓ Implement energy management plans compliant with national and international standards
- ✓ Prepare for the CEM certification exam with a strong foundation in theory and practice

Training Designed for:

This training course is intended for Energy managers and sustainability officers, Facility, maintenance, and operations managers, Mechanical, electrical and industrial engineers, Consultants in energy efficiency and renewable energy projects, Building owners, property managers and energy auditors and Professionals preparing for CEM certification.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ Introduction to Energy Management
 - Overview of Energy Management and the CEM Program
 - Energy Concepts and Units of Measurement
 - Energy Sources, Trends, and Global Energy Scenario
 - Energy Economics, Costs and Energy Pricing
 - Fundamentals of Energy Auditing
 - **Case Study:** Energy Management in Buildings and Industry

DAY TWO:

❖ Energy Audits and Energy Performance Assessment

- Types of Energy Audits: Walk-Through, Detailed and Investment-Grade
- Data Collection, Analysis and Benchmarking
- Energy Performance Indicators (EnPIs)
- Energy Accounting and Measurement & Verification (M&V)
- Identifying Energy Conservation Measures (ECMs)
- Hands-on Exercise: Energy Audit of a Facility

DAY THREE:

❖ Energy Systems and Efficiency in Buildings & Industry

- HVAC Systems Optimization and Energy Efficiency
- Lighting Systems and Control Strategies
- Motors, Drives, and Pumping Systems Efficiency
- Compressed Air, Steam, and Thermal Systems Management
- Industrial Process Energy Management
- Introduction to ISO 50001 Energy Management Systems

DAY FOUR:

❖ Renewable Energy & Energy Economics

- Overview of Renewable Energy Technologies: Solar, Wind, Biomass, and Geothermal
- Combined Heat & Power (CHP) Systems
- Energy Storage and Smart Grids
- Energy Project Financial Analysis: Payback, ROI, NPV, and IRR
- Energy Policies, Regulations, and Incentives
- Case Study: Renewable Energy Integration in Facilities

DAY FIVE:

❖ Energy Management Strategies & CEM Exam Preparation

- Energy Management Planning and Policy Development
- Energy Monitoring, Reporting, and Control Systems
- Risk Management and Sustainability in Energy Projects
- Advanced Energy Management Tools and Software
- CEM Exam Preparation: Sample Questions, Tips, and Techniques
- Workshop: Developing an Energy Management Action Plan

❖ Course Conclusion

❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

AIPS Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

USD\$ TBA - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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