



Certified Energy Manager[®]

Recognized as the Highest Standard for Energy Efficiency Professionals.

Who are Certified Energy Managers?

- Are you an energy manager looking to validate your experience and knowledge?
- Are you a consultant that specializes in improving the energy efficiency of buildings and building systems?
- Are you a building owner or manager looking to understand how energy savings can finance your next project?
- Are you involved in developing energy efficiency projects, strategies or sustainability programs for your organization or your clients?

A Certified Energy Manager is an individual who optimizes the energy performance of a facility, building, or industrial plant. The CEM is a systems integrator for electrical, mechanical, process, and building infrastructure, analyzing the optimum solutions to reduce energy consumption in a cost-effective approach. CEM's are often team leaders and help to develop and implement their organizations' energy management strategies. CEM's have gained increased recognition within the energy industry and by companies looking to strengthen their competitive position by having responsible energy strategies and sustainable operational practices.







What does the Certified Energy Manager (CEM[®]) Certification Program offer?

This program helps educate and qualify individuals involved in optimizing the use of energy in buildings and systems. By obtaining the CEM certification, candidates gain industry and peer recognition by demonstrating their understanding of energy-efficiency principles, practices, and technologies. The program raises the professional standards, both technical and ethical, of those engaged in energy efficiency and energy management.

> More Information CEM[®] Website

What is the bottom line for me or my company?

Gaining a wide-reaching and industry-recognized certification is always a personal and financial investment. Since its inception in 1981, the CEM certification program has demonstrated it's validity year after year. Individuals tell us a CEM certification has helped improve their career, improve their salary, and increase their job responsibility. Holding a CEM certification shows a fundamental understanding of the industry and a commitment to their profession. Companies, organizations, and consultants with a CEM on-staff often see a higher affinity with their customers because CEMs understand their customer's requirements, speak the language of energy efficiency, and are a trusted, unbiased source for accurate information.

What functional areas does the CEM[®] Certification Program cover?

The certification program requires fundamental knowledge across several core principles and practices specific to energy management in buildings and facilities. These include:

- Codes and Standards
- Energy Accounting and Economics
- Energy Audits and Instrumentation
- Electrical Power Systems and Motors
- HVAC Systems
- Industrial Systems
- Building Envelope
- CHP Systems and Renewable Energy
- Lighting Systems
 Boiler and Steam Systems
 Maintenance and Commissioning

- Fuel Supply and Pricing

- Building Automation and

Control Systems Thermal

Energy Storage Systems

 Energy Savings
 Performance Contracting and Measurement & Verification

How do I become eligible for AEE's CEM[®] certification?

Every certification program offered by AEE is defined by strict standards to ensure the program maintains it's industry-wide recognition and credibility. To that end, AEE stipulates three criteria that all CEM candidates must meet. Firstly, applicants must have relevant experience or educational credentials (see below). Secondly, candidates must undergo a defined training program that aligns with the fundamental knowledge base of the program, and the principles and practices of the industry as a whole. Thirdly, candidates must pass the associated exam to demonstrate their technical knowledge, proficiency, and abilities in the area of energy efficiency.

Experience & Education

Applicants must meet one of the following eligibility criteria:

- Hold a 4-year engineering or architectural degree OR
 Professional Engineer (PE) OR Registered Architect (RA) and
 3+ years related* work experience.
- Hold a 4-year technology, environmental science, physics, or earth science degree and 4+ years related* work experience.
- Hold a 4-year business degree and 5+ years related* work experience.
- Hold a 2-year energy management associate degree and 6+ years related* work experience.
- Hold a 2-year associate degree and 8+ years related* work experience.
- Have 10+ years related* work experience

What is the CEM[®], and how was it developed?

The Certified Energy Manager (CEM[®]) accreditation is one of the most globally respected in the field of energy management. Since 1981, over 30,000 professionals from over 100 countries have participated in AEE's CEM program. The program is ISO IEC 17024 accredited by Entidad Nacional de Acreditación (ENAC) and American National Standards Institute (ANSI,) and is also a U.S. Department of Energy Better Buildings Workforce Guidelines Recognized Program. It is also accredited by many other organizations worldwide. See aeecenter.org/cem for a complete list.

Why would I want to take a training program when I believe I already have the knowledge and experience required to pass an exam?

A CEM training program provides more value than only preparing individuals to take the associated exam. It brings all candidates to a base level of understanding across a wide variety of energy management topics.

For those entrenched in their normal daily activities, attending a training program, held away from the office, in a classroom environment can be a catalyst for improvement and change. For many, the chance to network, connect, and learn from other like-minded individuals is incredibly valuable.

I obtained my CEM[®] Certification, where do I go next?

The CEM certification can help define your status as an energy professional and help progress your career. Once complete, make sure you maintain your account and keep track of your certification on aeecenter.org.

You can also keep up to date on energy management practices and technologies by joining your local AEE Chapter. Energy professionals continuously tell us that they stay ahead in the industry by getting involved in their local community.

> Find Your Local Chapter AEE Chapter Search

*Related degree in science, engineering, architecture, business, law, finance, or related field and related experience in energy, building or facility management, or measurement and verification.



Which companies and industries value the Certified Energy Manager (CEM®) certification?

You can find CEMs across markets and industry sectors, from utilities, ESCOs, major multi-national corporations, power companies, respected controls contractors, and manufacturers, to federal, state, and local governments, military, universities, and school boards. Many of these organizations require a CEM certification as a condition of hiring or a requirement for advancement. Government organizations request the certification within "Requests for Proposals." The following list is a sample of companies across a wide range of industries that have demonstrated they value Certified Energy Managers.

- 3M
- 3M Canada
- Abbott Laboratories
- AK Steel
- ALCOA
- Alliance to Save Energy
- American Axle & Manufacturing
- Amgen
- Anheuser Busch
- ArcelorMittal
- Archer-Daniels-Midland
- AstraZeneca
- Atlas Copco Canada
- Baxter Healthcare
- Bayer Corporate & Business Services
- Bechtel National
- BMW Manufacturing Corporation
- Boeing
- BP North America
- Briggs & Stratton Corporation
- Bristol Myers Squibb
- Burrows Paper Corporation
- CalsonicKansei North America
- Cargill
- Carrier Corp UTC
- Caterpillar Inc
- CEMEX, Inc.
- Chevron
- Chrysler
- Conoco Phillips
- Cummins
- Dana Holdings Corporation
- Deere & Co.
- Dell, Inc
- Delphi Corporation
- Duracell
- Eastman Chemical Company

Association of Energy Engineers

- Eli Lilly & Company
- Eurocan Pulp and Paper
- ExxonMobil
- Fluor

CRE

- Ford Motor Company
- Freescale Semiconductor
- Frito-Lay, Inc.
- Fruit of the Loom
- GE Energy
- GE Wind Energy LLC
- General Mills Inc.
- General Motors Energy & Utilities Services Group
- General Motors of Canada
- Georgia Tech Enterprise Innovation Institute
- GlaxoSmithKline
- GM Brazil
- Goodyear Tire & Rubber Co
- Harley-Davidson Motor Company
- Hess
- Hewlett-Packard
- Hormel Foods
- IBM
- Intel
- John Deere
- Johnson & Johnson
- Kimberly-Clark
- Kraft Foods
- La-Z-Boy Inc
- Lockheed Martin
- Lone Star Steel Company
- Masco Corporation
- McCain Food USA
- Merck
- MillerCoors, LLC
- Motorola
- Nalco Company
- Nestle Purina Pet Care.
- Nestle USA, Inc.
- Northrop Grumman
- Novartis
- Owens Corning
- Papa John's International

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- Penske Truck
- PepsiCo

- Petrobras
- Pfizer
- PPG Industries
- Pratt & Whitney
- Pratt & Whitney Canada
- Procter & Gamble Mfg. Co.
- QuikTrip Corporation
- Raytheon
- Rockwell Automation
- RR Donnelly
- Sanofi-Aventis
- Shaw Industries, Inc.
- Shell Global Solutions
- Sherwin-Williams

- Sunoco, Inc.

Toyota

- U.S. Steel

- Unilever

- US DOE

- US EPA

- US Steel

- Wal-Mart

- Whirlpool

- Wyeth

– Xerox

– Walt Disney

- Vought Aircraft

- Yum! Brands, Inc.

- The Dow Chemical

- Towson University

- Tropicana Products, Inc.

- United Technologies

- Weyerhaeuser Company

Find A CEM Near You

AEE Certified Professionals Directory

CERT-CEM-04-2020

- Sikorsky Aircraft Corporation
- Standard Motor Products, Inc.
- Subaru of Indiana Automotive, Inc