cea®

Certified Energy Auditor

An Industry Recognized Certification for Energy Auditors

Who are Certified Energy Auditors?

– Do you evaluate and analyze energy use in a facility, identify energy conservation opportunities, and make recommendations where consumption can be reduced or optimized?

– Are you an energy auditor looking to validate your experience and knowledge?

– Are you a consultant that specializes in energy efficiency upgrades to buildings and building systems?

– Do you conduct audits and assessments in government buildings and are required to work to the US Department of Energy's Guide to Energy Audits?

Energy Auditors undertake energy efficiency assessments of large buildings and industrial facilities. Their audits cover building systems, occupancy, operations, maintenance, and code compliance. An auditor aims to provide their client with detailed survey results, risk mitigation analysis, implementation plans, and a final investment-grade analysis. Many auditors work to predefined codes and standards, such as the ASHRAE Standard 211-2018 for Commercial Building Energy Audits.

What does the Certified Energy Auditor (CEA®) Certification Program offer?

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

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. The CEA certification qualifies and auditor to work under the ASHRAE Standard 211-2018 for Commercial Building Energy Audits. Individuals report career improvements in the form of salary and responsibility increases. The certification shows individuals hold a fundamental understanding of the profession and a commitment to the highest standards of quality. Companies, organizations, and consultants with a CEA on-staff often see a higher affinity with their customers because CEAs understand their customer's requirements, speak the language of energy auditing, and are trusted to report and validate energy metrics and potential savings.

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What functional areas does the CEA® Certification Program cover?

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

- Developing an Energy Audit Strategy & Plan
- Energy Use Analysis
- Data Collection & Analysis
- Economic Analysis
- Lighting Systems
- Heating, Ventilation & Air Conditioning Systems
- Domestic Hot Water Systems

- Motors and Drives & Compressed Air Systems
- Building Envelope
- Building Automation Systems, Process Automation Systems, & Energy Management and Control Systems
- Alternative Generation & Storage
- Transport

How do I become eligible for AEE's CEA® 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 CEA 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:

- 4-year or Level 6 European Qualifying Framework (EQF) engineering/architectural degree* OR Professional Engineer (PE) OR Registered Architect (RA) OR Current status of Certified Energy Manager (CEM®), and 3+ years related** work experience.
- 4-year or Level 6 EQF (non-engineering/architectural) degree*, and 4+ years related** work experience.
- 2-year or Level 5 EQF associate degree*, and 5+ years related** work experience.
- Have 10+ years related** work experience

*or equivalent degree.

**Related experience in energy auditing and/or participating in a team doing energy assessments.

Who recognizes or accredits the CEA® program?

The Certified Energy Auditor (CEA) is accredited by many organizations worldwide. Visit the AEE website for a complete list.

CEA® is ISO IEC 17024 accredited by Entidad Nacional de Acreditación (ENAC) and American National Standards Institute (ANSI)

CEA® is a US Department of Energy, Better Buildings Workforce Guidelines recognized programs.

The International CEA® program is recognized by the UK's Energy Savings Opportunity Scheme (ESOS).

CEA® is recognized for Ireland's Energy Audit Scheme.

CEA® is required under United Arab Emirates ESCO accreditation scheme.

CEA® is recognizedby the Saudi Energy Efficiency Center (SEEC).

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 CEA 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 CEA® Certification, where do I go next?

The CEA certification can help define your status as an energy auditor 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 AEE Chapter

Which companies and industries value the Certified Energy Auditor (CEA®) certification?

You can find CEAs 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 CEA 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 Auditors.

– 3M
– 7-Eleven
– Accenture
– AECOM
– AEP - American Electric Power
– AGS Enterprises Inc.
– Ameresco
– American Electric Power
– ARAMCO
– Boeing Company
– Booz Allen Hamilton
– Brady Services
– Cabot
– Caterpillar Inc.
– CBRE
– Clean Technology Centre
– CLEAResult
– Coffman Engineers
– ConEdison Solutions Company
– Constellation Energy
– DAIKIN
– Daimler Chrysler
– Defence Force Ireland
– Department of Defense
– DTE Energy
– Duke Energy
– Eastern Research Group
– Edison Energy
– Eenovators Limited
– Efficiency Nova Scotia Corporation
– EfficiencyOne
– EM3
– Energy Analytics LLC
– Energy Cybernetics
– ENGIE Impact
– Eversource Energy
– Florida Power and Light
– Gannett Fleming Inc
– Georgia Power Co.
– Greater Orlando Aviation Authority
– Harrison Energy Partners
– Hitachi Consulting

– Honda of America Manufacturing
– Honeywell
– Intel Corporation
– Izzat Marji Group
– Johnson Controls Inc
– Jones Lang LaSalle
– Jordan Advanced Alternative Energy And Transport Solutions
– King Fahad University of Petroleum and Minerals
– Kuwait Institute for Scientific Research
– Leidos Engineering
– Lockheed Martin
– London Environmental Network
– Loring Consulting Engineers Inc.
– Massachusetts Port Authority
– Mississippi Power Company
– National Energy Management Institute
– National Grid
– Naval Facilities (NAVFAC) Hawaii
– New York City Dept. of Education
– New York Power Authority
– New York University
– Nissan
– NORESCO
– Oman Electricity Transmission Company
– Parsons Corporation
– Penn State Facilities Engineering Institute
– Pfizer
– Philips Lighting
– Pinnacle Energy Services
– Practical Energy Solutions
– Public Works Department of Malaysia
– Raytheon Co.
– Realpoint Real Estate Consultancy
– REMICA S.A
– RMB Electrical Consultancy
– Rockwell Automation

– Sain Engineering Associates Inc.
– Sanofi
– Saudi Aramco
– Saudi Energy Efficiency Center (SEEC)
– Schneider Electric
– Siemens Building Technologies
– Southern California Edison
– Southern California Gas Company
– Support Services of Alaska
– Sustainable Buildings Solutions
– Tampa Electric Company
– Target Energy
– Telecor S.A.
– Texas A&M University
– Texas Instruments Inc.
– The Home Depot Canada
– Toyota Motor North America
– Trane
– Trinity Consultants
– TVA
– UNESCO
– United States Department of Agriculture
– US Army Corps of Engineers
– US Department of State
– US Dept of Homeland Security
– Utility Management Services Inc.
– Wal-Mart Stores Inc.
– Walt Disney Imagineering
– Washington Real Estate Investment Trust
– WSP USA
– Yardi Systems Inc.
– Yum! Brands Inc.
– ZESCO Limited

Find A CEA Near You
AEE Certified Professionals Directory