

An Entry-Level Certification for Energy Efficiency Professionals

CERTIFICATION SCHEME 1.0



Scope

Energy Efficiency Practitioners $^{\text{TM}}$ are entry level professionals who are interested in a career path in the energy industry or current professionals wishing to transition to the energy sector. If you work in a commercial, government, institutional, or industrial building, the Certified Energy Efficiency Practitioner (EEP) may be right for you.



Eligibility Requirements for Competence

Individuals applying for the EEPTM Certification Examination must attend an approved preparatory training course, meet the following education, and experience requirements, and complete a certification application.

Education and Experience Requirements

Education and Experience

2-year Technical degree or 4-year degree from an accredited university of college

An individual who is currently employed in a company and practicing energy efficiency, energy management, or operations and maintenance of a building or facility

An individual who has at least 1 year of experience in energy efficiency, energy management, or operations and maintenance of a building or facility

Military Veteran

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Effective Date: 4/29/2024

Examination Requirements for Competence

To earn the EEP™ Certification, candidates must pass the certification examination. The competency requirements assessed are the following:

Certified Energy Efficiency Practitioner - Examination Blueprint

Body o	Body of Knowledge / Duties and Tasks (% Exam)	
1	Introduction to Energy Production, Transmission and Distribution (8–12%)	
101	Electric energy generation, transmission, & distribution	
102	Natural gas production, transmission, & distribution	
103	Liquid fuels distribution	
2	Building Utilities & Energy Bills (8–12%)	
201	Terminology & units of measurement	
202	Energy vs power	
203	Electricity & gas rate structures	
204	Power factor	
205	Energy bill helpful analysis	
206	3rd party energy	
3	Economics (5–7%)	
301	Financial decision criteria	
302	Simple payback calculations	
303	Financial Alternatives	
304	Societal benefits, additional capital resources, incentives	
4	Energy Auditing and Instrumentation (6–10%)	
401	ASHRAE audit levels I, II, III	
402	Types of audits & funding	
403	Benefits of benchmarking	
404	Energy audit instrumentation uses & safety	

Body o	Body of Knowledge / Duties and Tasks (% Exam)		
5	Electrical Systems (6-10%)		
501	Basics of electricity		
502	Electricity flow throughout a building		
503	Power quality		
6	Motors & Drives (6–10%)		
601	Power factor		
602	Types of motors		
603	Motor speed (operation efficiency)		
604	Fan / affinity loads (variable speed drive)		
605	Variable volume options		
7	Lighting (6–10%)		
701	Basics & Terminology		
702	Lighting technology comparisons		
703	Maintenace and controls		
8	Thermal Energy Systems (6–10%)		
801	Heat transfer		
801 802	Heat transfer Energy loss reduction (strategy analysis)		
802	Energy loss reduction (strategy analysis)		
802 803	Energy loss reduction (strategy analysis) Building related heat transfer		
802 803 804	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer		
802 803 804 9	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%)		
802 803 804 9 901	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities		
802 803 804 9 901 902	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions		
802 803 804 9 901 902 903 10 1001	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities Mechanical Systems & HVAC (8–12%) Equipment types & uses overview, heating & cooling systems		
802 803 804 9 901 902 903 10 1001 1002	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities Mechanical Systems & HVAC (8–12%) Equipment types & uses overview, heating & cooling systems Boilers, chillers, cooling towers		
802 803 804 9 901 902 903 10 1001	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities Mechanical Systems & HVAC (8–12%) Equipment types & uses overview, heating & cooling systems		
802 803 804 9 901 902 903 10 1001 1002 1003 1004	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities Mechanical Systems & HVAC (8–12%) Equipment types & uses overview, heating & cooling systems Boilers, chillers, cooling towers		
802 803 804 9 901 902 903 10 1001 1002 1003	Energy loss reduction (strategy analysis) Building related heat transfer Equipment related heat transfer Building Automation Systems (6–10%) Control systems (terminology & functions) BAS functions Potential cost savings opportunities Mechanical Systems & HVAC (8–12%) Equipment types & uses overview, heating & cooling systems Boilers, chillers, cooling towers Ventilation air		

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Body of Knowledge / Duties and Tasks (% Exam)		
11	Maintenance (5–7%)	
1101	Maintenance technology & practices	
1102	Water & sewer conservation & maintenance	
1103	Compressed air & steam leaks	
1104	Boiler scale buildup	
1105	Motor maintenance	
12	Renewable Energy / Carbon Reduction (8-12%)	
12 1201	Renewable Energy / Carbon Reduction (8–12%) Definition of renewable energy / types	
	33	
1201	Definition of renewable energy / types	
1201 1202	Definition of renewable energy / types Renewable Energy Credits "RECs"	
1201 1202 1203	Definition of renewable energy / types Renewable Energy Credits "RECs" Net metering	
1201 1202 1203 1204	Definition of renewable energy / types Renewable Energy Credits "RECs" Net metering Utility scale	

Examination Specifications

The examination will be 2-hours, open book / open notes and follow the specifications outlined in the examination blueprint. It will include 65 multiple-choice graded questions in accordance with the percent of exam range for each task.

Code of Ethics

Codes of Practice are found in the Code of Ethics for Certified Professionals V1.1 dated November 21, 2019, available at **www.aeecenter.org/CodeofEthics.**



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Recertification Requirements

An EEP™ must accumulate ten professional credits every three years and submit a completed Renewal Form to AEE to remain certified. Professional credits for recertification can be accumulated at any time within the three-year period. Detailed explanation of activities applicable as credits for certification renewal available at www.aeecenter.org/certification/renewal.

Activities for EEP™ Renewal Credits

Continued employment in energy auditing activities:

1 credit per year

Membership in a professional engineering society

1 credit per year

Offices held in a professional engineering society:

- 1 credit per year

Continuing education (CEU's) / professional activities (seminars or conferences) including but not limited to energy efficiency, energy management, operations or maintenance of a building or facility

- 2 credits per CEU, college credit hour or 10 contract hours for training

Awards presented and/or papers published involving energy, operations, or maintenance:

- 1 credit per: one energy-related presentation
- 2 credits per: one energy-related paper
- 2 credits per: one energy-related individual award

Certified Professionals who do not acquire sufficient EEP maintenance points to be recertified on the recertification date will no longer have an active certification and be notified in writing of suspension from using the EEP designation. They will also no longer be listed as an EEP in any AEE publication. A lapsed EEP must resubmit to the certification process and successfully meet the criteria for certification by personal data information and examination. Another option for certified professionals is to acquire make-up points at a cumulative total equal to 3.5 per year for every year since date of expiration. This option is available one-time only. Certifications that have lapsed more than three renewal cycles must retake the EEP exam.

An EEP, upon retiring and/or and reaching the age of sixty-five, can be designated as "EEP – Retired," will no longer be required to pay renewal fees, and will no longer be listed in our directory of actively practicing EEPs. No further reporting is necessary except to notify AEE of meeting the age requirement by sending a copy of the retired EEP's Driver's License.

Energy Efficiency Practitioners[™]

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