



The Association of Energy Engineers

IISWBM

This document to be used along with IISWBMCEMMumbaiApplication2017.doc



# Comprehensive 5-Day Training Program for Energy Managers



## Preparatory Courses and Certification Examinations for the Certified Energy Manager

*Locations in India and Nepal* (<https://www.aeecenter.org/certifications/certifications/certified-energy-manager>)

This seminar provides an in- depth, comprehensive learning and problem-solving forum for those who want a broader understanding of the latest energy cost reduction techniques and strategies, as well as serving as a preparatory course of instruction for energy professionals preparing to sit for AEE's Certified Energy Manager (CEM®) examination. Frequently Asked Questions are available at <https://www.aeecenter.org/certifications/faq-qa>

### PROGRAM OF STUDY

The program begins by examining the fundamentals within all key areas of energy management. From there, the instructors systematically move to a "working level" knowledge of the specific principles and techniques needed to really get the job done. This approach has been designed to fulfill the needs of professionals who seek a broader and more detailed learning experience than can be provided in AEE's shorter courses. In five days of at least 32 hour of interaction and four hours of CEM examination, you can gain the knowledge and confidence it takes to effectively apply state-of-the-art principles of energy management, and to achieve control over energy costs in your organization — whether you're responsible for managing a single facility or developing an energy management program for multiple corporate facilities, government buildings, etc. The program has been completed by thousands of professionals since its inception in 1994.

### REGISTRATION

Updates on Course schedules, venue, dates, cost, eligibility, contact for details and registration information are available at: [www.aeecenter.org/internationalcertification/cem](http://www.aeecenter.org/internationalcertification/cem) and [www.iiswbm.edu](http://www.iiswbm.edu). Email your queries to [bkchoudhury@iiswbm.edu](mailto:bkchoudhury@iiswbm.edu) and [binoykchoudhury@gmail.com](mailto:binoykchoudhury@gmail.com) and/or phone/SMS +91 9433153009

### INDICATIVE INFORMATION

Course schedule: 2<sup>nd</sup> Batch for CEM Training Program during 3<sup>rd</sup> to 7<sup>th</sup> October 2017 at The Institution of Engineers (India), Maharashtra State Centre, 15, Haji Ali Park, K.Khadye Marg, Mahalakshmi, Mumbai - 400 034. Subsequent batches would be held in other metropolis in India and Nepal.

Options: As per eligibility and interest, candidates can opt for any one of the following:

| Option | What It Means                    | Eligibility                                   | Duration   | Fees per head *          |
|--------|----------------------------------|---|--|--------------------------|
| A      | CEM Examination                  | CEM Training/ BEE CEM/CEA/MBA-PS <sup>#</sup> | Four hours: 1 – 5 pm on 7 <sup>th</sup> Oct 2017     | INR 15000 (USD 235 appx) |
| B      | CEM Training and CEM Examination | As mentioned on right side column             | 32 hours in 5 days (October 3-7, 2017) plus Option A | INR 40000 (USD 625 appx) |

\* Fees include relevant expenditures for Lectures, Certificate, Laboratory, Study Materials, Lunch, etc. as applicable, but excluding lodging, dinner, etc.

If those who are eligible, in terms of educational qualification, to take the exam (but do not meet the experience requirement, on the date of application for CEM examination, as mentioned on the right-side column of this paper) receive a passing score and they can still earn the Energy Manager In Training (EMIT) certification. Then they have up to six years to gain the number of years of experience needed based on their education level (see the eligibility requirements for the CEM and EMIT).

### CERTIFICATION ELIGIBILITY

The CEM exam will be administered at the close of instruction on day six to those, with requisite experience and degree from an (AICTE/UGC/AIU/Such Body) accredited university or college, who have qualified in advance to sit for the exam by submitting a completed CEM application and fee.

Each applicant for the CEM certification is required to attend AEE's five-day "Certified Energy Manager" training\*\* program in order to sit for the exam. Prior to sitting for the exam, each candidate must complete an application. Each candidate must also pass the four-hour written exam as well as meet one of the following eligibility criteria and paid full-time work experience:

- A four-year degree in engineering or architecture or be a registered professional engineer (P.E.), or registered architect (R.A.). In addition, the applicant must have at least 3+ years experience in energy engineering or energy management; or
- A four-year degree in technology, environmental science, physics, or earth science and have at least 3+ years experience in energy engineering or energy management; or
- A three-year degree in business and at least 6+ years experience in energy engineering/management; or
- A three-year degree holder with post-graduate degree in Management or equivalent with 5+ years of work experience involving use of energy in operation, maintenance, planning, etc.; or
- A post-graduate Engineer (Master of Engineering/Master of Technology) or equivalent with 2+ years of work experience involving use of energy in operation, maintenance, planning, etc.; or
- A graduate Engineer with post-graduate degree in Management or equivalent with 2+ years of work experience involving use of energy in operation, maintenance, planning, etc.; or
- A diploma Engineer or equivalent with 6+ years of work experience involving use of energy in operation, maintenance, planning, etc.; or
- a post-graduate in Physics or Electronics or Chemistry (with Physics and Mathematics at graduation level) with 5+ years of work experience involving use of energy in operation, maintenance, planning, etc.

\*\* CEM Training would not be mandatory for the following candidates:

- Candidate possessing CEM or CEA certification from Bureau of Energy Efficiency (BEE), Government of India
- Candidate completed, within three years from the date of examinations they take, <sup>#</sup> MBA-PS degree OR Master in Public Systems Management (MPSM) with specialization in Energy Management from University of Calcutta

*Rise to the Top of the Energy Management Profession: Become AEE Certified*

# COURSE OUTLINE FOR CEM OF AEE INTERNATIONAL

(<https://portal.aeecenter.org/files/certification/International/SICEMBrouchure.pdf>  
<https://portal.aeecenter.org/14a/pages/index.cfm?pageID=4827> and <https://www.youtube.com/watch?v=qcSqIFVV-1k>)

## Section I – Mandatory Energy Accounting & Economics

## Section II – Mandatory Energy Audits & Instrumentation

Candidates should choose any Nine of the ..... remaining 13 sections from the following:

Electrical Systems

Heating, Ventilating, & Air Conditioning Systems

Motor and Drive Systems

Industrial Systems

Building Envelope

Combined Heat & Power Systems and Renewable

Energy Systems

Building Automation Systems

Control Systems

Thermal Energy Storage Systems

Lighting Systems

Boiler & Steam Systems

Maintenance & Building Commissioning

Financing, Performance Contracts,

Measurement & Verification

For the detailed course outline, view the link.....

[SI CEM Study Guide](https://www.aeecenter.org/certifications/resources/cem-resources)

(<https://www.aeecenter.org/certifications/resources/cem-resources>)

## COURSE INSTRUCTORS FOR CEM\*

Binoy K Choudhury,  
Ph D., C.E.M.(AEE, USA),  
A.E.A.(BEE, Govt. of India)



Other expert(s) would  
be available as per  
requirement and  
availability

Binoy K Choudhury, the only CEM Trainer in the region, a Mechanical Engineering Graduate from Jalpaiguri Government Engineering College, Ph D from the Indian Institute of Technology (IIT) Kharagpur, Fellow of Institution of Engineers (India), Association of Engineers (India) & Indian Water Works Association - is currently Professor in the Energy Management stream of MBA PSM (erstwhile MPSM) programme at the Indian Institute of Social Welfare and Business Management (IISWBM), Kolkata. He is Guest Faculty member of IEST and Kalyani University. He can be reached at [bkchoudhury@iiswbm.edu](mailto:bkchoudhury@iiswbm.edu) and [binoykchoudhury@gmail.com](mailto:binoykchoudhury@gmail.com).

He also Coordinated 13 batches of Short Term Course in Energy Management and Audit since 2007. He has over 21 years of teaching/ professional experience which includes more than 18 years in the present Institute. He served as Principal Investigator/Coordinator in more than ten renewable energy and energy efficiency projects which covers community development to industrial profitability/sustainability issues. He is honorary Assistant Director International Member Development for Asian Sub-continent, Association of Energy Engineers USA (<https://www.aeecenter.org/certifications/certifications/certified-energy-manager/>); member in Energy & Environment Standing Committee, the Bengal National Chamber of Commerce & Industry; JICA Alumni Association of India; The Bengal Chamber Energy and Environment Committee; Low Carbon Energy for Development Network (UK). He is founder editor of Energy Window, AEE Newsletter, on the editorial board of REASON- A Technical Journal and reviewer of ACTA Press, Energy for Sustainable Development, etc.

Use format in IISWBMCEMMumbaiApplication2017.doc to apply (through both Email to [bkchoudhury@iiswbm.edu](mailto:bkchoudhury@iiswbm.edu) as well as [binoykchoudhury@gmail.com](mailto:binoykchoudhury@gmail.com) and copy to [fo@iiswbm.edu](mailto:fo@iiswbm.edu) as well as [registrar@iiswbm.edu](mailto:registrar@iiswbm.edu) by 20<sup>th</sup> September, 2017, and also hard copy to be handed over on 3<sup>rd</sup> October 2017 at site in Mumbai, with Name(s), Qualifications & Experience (enclose supporting document), Address for Communications (with mobile number and Email), as per Application Format with PP size Photo, Option (A or B) and proof of payment made (eg. bank generated receipt with UTR number) in any one of the following three options:

- A/c Payee Bank Draft in favour of "Indian Institute of Social Welfare & Business Management" at the time of admission. The draft should be drawn on State Bank of India, Service Br., Kolkata and should reach the Institute by 20<sup>th</sup> September, 2017 between 10.30 a.m. to 03.00 p.m. (except Saturday & Sunday) OR
- Bank details for NEFT/RTGS Transfer: Beneficiary: IISWBM, Name of Bank: State Bank of India, Surya Sen Street Branch, Kolkata, ACCOUNT NO.:10252384198, IFS Code: SBIN 0003496.



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