

BOC PROGRAM GUIDE

1. OBJECTIVES

Building Operator Certification (BOC®) is a nationallyrecognized training and certification program for building engineering and maintenance staff which offers improved job skills to create more comfortable, energy efficient facilities. BOC program objectives include the following:

- Provide a standard of professional competence in energy and resource efficient building operations and maintenance.
- Offer a career ladder to those in the building operations and maintenance field through stackable professional credentials.
- Develop a standard for educational programs for building operations staff.

2. ACCREDITATION AND RECOGNITION

BOC is approved for continuing education by the following organizations:

- BOC classes and webinars are approved by the Green Building Certification Institute (GBCI) as continuing education training for LEED[®] professionals seeking to maintain their credentials.
- The Building Owners and Managers Institute (BOMI) accepts BOC classes for Continuing Professional Development (CPD) points towards renewal of the professional designations offered by BOMI.
- BOC and BOMI offer additional education opportunities for both organizations by awarding competency credit between BOC Level I and II and BOMI International's Systems Maintenance Technician (SMT) designation.

- The American Hotel and Lodging Educational Institute recognizes BOC classes for continuing education points for the Certified Engineering Operations Executive (CEOE) recertification program.
- The National Association of Power Engineers (NAPE).
 - California State University (CSU) and the University of Maine offer continuing education units for completion of BOC classes.
 - The California State Employees Trades Council (SETC) recognizes BOC as a component of the critical skills bonus plan.

3. ADMINISTRATOR

The Northwest Energy Efficiency Council (NEEC) is the national administrator of the BOC Program. BOC is available across the US and in Canada.

NEEC is a non-profit business association of the energy efficiency industry established in 1994. Member companies provide energy efficiency products and services to residential, commercial and industrial customers in the Northwest.



4. ELIGIBILITY

Program eligibility is based on work experience and education AND completion of BOC classes, tests, and facility projects.

Level I: Building Systems Maintenance

It is highly recommended that program participants have a high school diploma or GED, and:

• Two or more years of experience working in operations and maintenance of a commercial or institutional facility,

OR

• A minimum of one year of experience working in operations and maintenance of a commercial or institutional facility AND one year of technical college level education in commercial or industrial facilities operations and maintenance,

OR

• Two or more years of experience in energy management of commercial, institutional or industrial facilities with a focus on operations and maintenance.

Level II: Equipment Troubleshooting & Maintenance

It is highly recommended that program participants have a high school diploma or GED, and:

- A technical degree and three years of experience working in operations and maintenance of a commercial or institutional facility, OR
- A union membership at journey level and three years of experience,

OR

 BOC Level I Certification or Training Certificate of Completion (TCOC) and four years of experience.

5. TRAINING CERTIFICATE OF COMPLETION (TCOC) REQUIREMENTS

Candidates must meet the eligibility criteria above and have obtained the following:

- Satisfactory completion of seven classes in Level I and/or six classes in Level II, and
- A passing grade of 70% or higher on class tests and on-site facility projects assigned for each class
- Submission of application documentation

6. CERTIFICATION CREDENTIAL

The effective practice of building operations and maintenance requires in-depth knowledge and experience of a wide variety of subjects. For certification purposes, candidates need to demonstrate the knowledge and ability to apply the essentials of effective and energy efficient operations and maintenance. This is demonstrated through passing of the BOC Certification Exam. Eligibility to sit for the exam is based on earning the Level I TCOC (see #5 above).

Individuals awarded BOC Certification will receive a BOC certificate bearing their name, a BOC identification card, and a letter of recognition sent to the employer and the company employee newsletter editor.

Information on registering for the Certification Exam is provided during each course to students and to graduates from the national BOC program throughout the year. Registration options vary; the exam fee is \$285.

7. BOC MAINTENANCE

The continuing education of building operators improves their ability to cope with changing building equipment, practices and technologies. To retain the active status of a BOC credential, a building operator must accumulate maintenance points and submit an annual credential maintenance application. Maintenance points are earned through continued employment in the industry and continuing education, among other things. Details can be found at https://www.theboc.info/continuing-education/maintaining-credentials/activities-points-chart/ The fee to renew all credentials is \$75.

BOC Maintenance Activities and Points Earned

Continued employment in the profession	2 points/year
Continuing education/train- ing in building operations	1 point for each hour of trainng
Completion of energy efficiency projects at your facility	1 point for each hour of project time up to 11 points/year
Membership in a building operations trade or energy association	1 point/year
Offices held in a trade or energy association	2 points/year
Awards earned involving resource efficient operations	2 points/award



Level I - Building Systems Maintenance

BOC LEVEL I provides an overview of the building shell and reviews the design and maintenance of energy-using systems and equipment. A level I course is made up of six core classes and one supplemental class.

CORE CLASSES

BOC 1001 – Energy Efficient Operation of Building HVAC Systems		
BOC 1002 – Measuring and Benchmarking Energy Performance		
BOC 1003 – Efficient Lighting Fundamentals		
BOC 1004 – HVAC Controls Fundamentals		
BOC 1005 – Indoor Environmental Quality		
BOC 1006 – Common Opportunities for Low-Cost Operational Improvement		
SUPPLEMENTAL CLASSES (1 OFFERED PER COURSE SERIES)		
BOC 1007 – Facility Electrical Systems		
BOC 1008 – Operation & Maintenance Practices for Sustainable Buildings		

- BOC 1010 Energy Efficient Ventilation Strategies and High Performance Heating and Cooling Equipment
- BOC 1011 Energy Efficient Ventilation Strategies and Energy Savings through Energy Recovery
- BOC 1012 High Performance Heating and Cooling Equipment and Energy Savings through Energy Recovery

Level II - Equipment Maintenance & Troubleshooting Courses

BOC LEVEL II provides an overview of preventive maintenance, equipment troubleshooting, and diagnostic strategies for energy-using systems and equipment. Level II courses are made up of four core and two supplemental classes.

CORE CLASSES

BOC 201 -	Preventive Maintenance and Troubleshooting Principles	
BOC 202 -	Advanced Electrical Diagnostics	
BOC 203 -	Advanced HVAC Troubleshooting and Maintenance	
BOC 204 -	Advanced HVAC Controls and Optimization	
SUPPLEMENTAL CLASSES (2 OFFERED PER COURSE SERIES)		

BOC 210 -	Advanced Indoor Air Quality	
BOC 211 -	Motors in Facilities	
BOC 212 -	Water Efficiency for Building Operators	
BOC 213 -	Mastering Electric Control Circuits	
BOC 214 -	Introduction to Building Commissioning	
BOC 215 -	Electric Motor Management	
BOC 216 -	Enhanced Automation & Demand Reduction	
For detailed course descriptions, visit our website at		

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8. BOC COURSE SERIES

Course series consist of classroom training, group activities, on-site facility project assignments, and open-book tests. All classes are one-day sessions unless otherwise noted. In general, a course series is scheduled one day a month for a period of seven months (or six months for Level II) and classes are held in most areas from 8am to 4pm.

9. FEES

Registration fee varies from state to state.

National Registration Fee	
(Level I or II full series)	\$1995
Certification Exam:	\$285
Credential Maintenance Fee:	\$75/year

10. BOC CONTACT

BOC administrative offices are open weekdays from 8am to 5pm Pacific Standard Time, excluding Federal holidays.

Website:	www.theBOC.info
Email:	bocinfo@theboc.info

OUR MISSION

The mission of BOC is to elevate the profession of the building operator through training in energy efficiency and smart building technologies, continued education, and certification. This skilled workforce provides energy and resource savings to building owners and organizations.

