



BOC PROGRAM GUIDE



BUILDING OPERATOR CERTIFICATION LEVEL I AND II

1. OBJECTIVES

Building Operator Certification (BOC®) is a nationally-recognized training and credentialing program for building engineering and maintenance staff that offers improved job skills to create more energy efficient, comfortable, healthy 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.

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.

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 BOC Fundamentals of Energy Efficient Building Operations certificate or 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: Improving Building Operational Performance

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



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

OR

- 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.

5. TRAINING CERTIFICATE OF COMPLETION (TCOC) REQUIREMENTS

Candidates must meet the eligibility criteria 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 CREDENTIAL 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 activities. 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/training in building operations	1 point for each hour of training
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
- BOC 1013 – Smart Buildings Fundamentals
- BOC 1014 – Electrification and Building Operations

Level II - Improving Building Operational Performance

BOC LEVEL II prepares operators to evaluate the operational performance of their buildings with a focus on improving energy efficiency. Operators learn how to collect and analyze building data in order to prepare a building walk-through plan to identify opportunities to improve performance. Level II courses are made up of five core classes and one supplemental class.

CORE CLASSES

- BOC 2001A & B – Building Scoping for Operational Improvements
- BOC 2002 – Optimizing HVAC Controls for Energy Efficiency
- BOC 2003 – Introduction to Building Commissioning
- BOC 2004 – Water Efficiency for Building Operators
- BOC 2005 – Project Peer Exchange Day

SUPPLEMENTAL CLASSES (1 OFFERED PER COURSE SERIES)

- BOC 2010 – Preventive Maintenance and Troubleshooting Principles
- BOC 2011 – Motors in Facilities
- BOC 2012 – Advanced Electrical Systems Diagnostics
- BOC 2013 – Mastering Electric Control Circuits
- BOC 2014 – Enhanced Automation and Demand Reduction

For detailed course descriptions, visit our website at <http://www.theboc.info/certification/course-descriptions/>



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).....	\$2,495
Certification Exam:.....	\$325
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.

