



**ENROLL TODAY**  
**SAVE ENERGY AND MONEY TOMORROW**

**MID-ATLANTIC LOCATIONS & REGISTRATION**

- |              |          |                      |
|--------------|----------|----------------------|
| Pennsylvania | Maryland | West Virginia        |
| New Jersey   | Delaware | District of Columbia |
|              | Virginia |                      |

Take advantage of group rates by enrolling multiple BOC trainees.

**FEES:**

- BOC Level I or II course:.....\$1,695 per person
- Additional Registrant: .....\$1,395  
 (for every full priced person, receive a discount for one additional person from same employer in same course series)
- GSA Preferred Pricing: .....\$1,537.03 per person  
 (federal employees and military veterans only)
- GSA Preferred Pricing Additional Registrant: .....\$1,335.26  
 (for every GSA full priced registrant, receive a discount for one additional registrant from same employer in same series)
- Green Schools Alliance Members Discount: \$100 off full priced registrants
- Certification Exam Fee: .....\$285
- Certification Maintenance Fee: .....\$65 per year

**TUITION REBATES MAY BE AVAILABLE IN YOUR AREA.** Visit <https://business.pct.edu/nssc/boc.htm> for more info.

For other states and locations, contact BOC's national office at [www.theBOC.info](http://www.theBOC.info) or call 877.850.4793



**BUILDING OPERATOR CERTIFICATION**

PROFESSIONAL TRAINING AND CERTIFICATION IN ENERGY EFFICIENCY SINCE 1996

The average BOC certified operator reduces energy bills by over \$10,000 per year.\*  
\*Third-party verified; based on \$.10 per kWh electricity

Sign up for courses in the Mid-Atlantic region



Learn. Lead. SUSTAIN.



National Sustainable Structures Center  
 Pennsylvania College of Technology  
 One College Avenue  
 Williamsport, PA 17701  
 570.327.4768  
[www.pct.edu/nssc/](http://www.pct.edu/nssc/)



**About Penn College/NSSC**

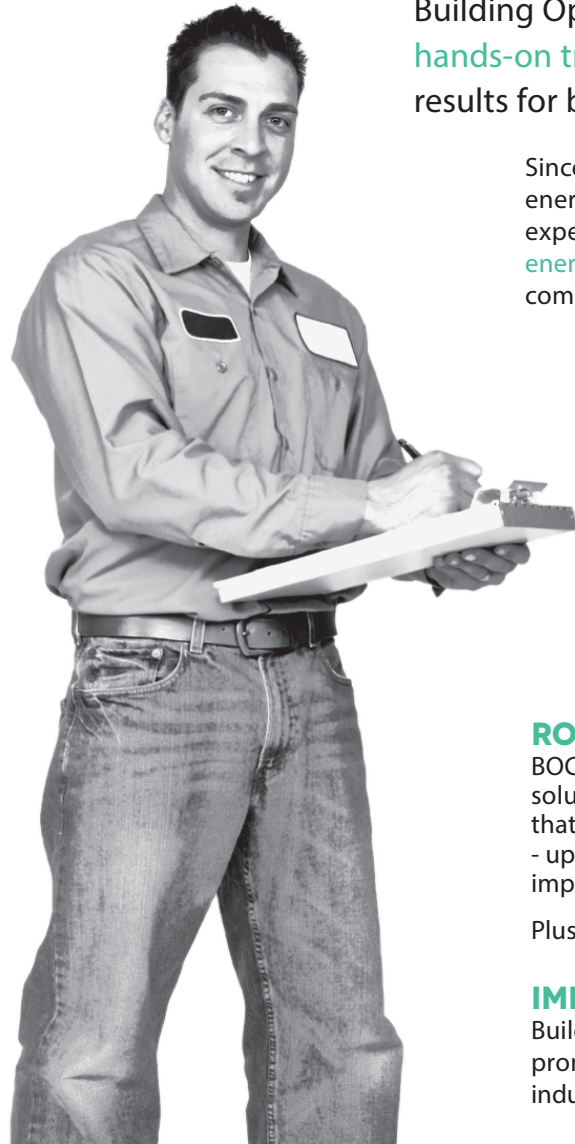
Pennsylvania College of Technology is a special mission affiliate of Penn State and a national leader in applied technology education. The National Sustainable Structures Center operates under Penn College's Workforce Development & Continuing Education department and provides hands-on building science and energy conservation training in the commercial and residential fields.

Register at <https://business.pct.edu/nssc/boc.htm> or call 570.327.4768



**PROFESSIONAL DEVELOPMENT**  
 Building Skills. Improving Processes. Delivering Results.

# EARN THE ESSENTIAL CREDENTIAL IN ENERGY EFFICIENCY



Building Operator Certification is a **classroom and hands-on training program** that delivers immediate results for building owners, operators and occupants.

Since 1996 BOC® has helped building operators increase their skill levels in energy efficient building maintenance. Created and validated by industry experts and practitioners, **BOC is the only credential program that verifies energy savings via third party analysis**, and the only program to require the completion of hands-on projects for certification.

In both Level I & II courses, students demonstrate knowledge of their own building by completing projects involving documentation of building equipment, systems and controls; benchmarking the building's performance using ENERGY STAR® Portfolio Manager™; updating occupancy profiles; reviewing HVAC systems and operation and mapping the facility's electrical distributions system.

### WHO SHOULD ENROLL?

Operating engineers, building technicians, maintenance mechanics and others in the skilled trades.

### ROI FOR BUILDING OWNERS.

BOC teaches operators to find practical, low-cost and no-cost efficiency solutions by working with existing systems. Independent research shows that BOC operators consistently save money and energy in their facilities - up to \$20,000 a year - thanks to energy conservation projects, air quality improvements and other initiatives.

Plus, the savings are instant and continuous.

### IMPACT YOUR BUILDING & YOUR CAREER.

Building operators with BOC credentials are more likely to be hired, promoted and valued in their jobs. With BOC training, you become an industry expert in energy efficiency.

### PROGRAM ELIGIBILITY

Eligibility is based on work experience and education AND completion of BOC classes, exams, and facility projects.

Level I:

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

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

Level II:

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
- Completion of BOC Level I course and four years of experience.

### TRAINING CERTIFICATE OF COMPLETION REQUIREMENTS

Candidates must meet the eligibility criteria above and:

- Attend **7** classes in Level I and/or **6** classes in Level II, and
- Earn a passing grade on class exams, and
- Complete on-site facility projects assigned.

### EARN THE CERTIFICATION CREDENTIAL

Candidates that have earned the BOC Training Certificate of Completion are eligible to sit for the BOC certification exam.

Individuals that pass the BOC certification exam will be awarded BOC Certification and can use the designation Certified Building Operator (CBO).

### EXAMPLE BOC MAINTENANCE ACTIVITIES & POINTS EARNED

Continued employment in building operations	2 points/year
Continuing education in building O&M or energy management topics	1 point for each hour
Completion of energy efficiency projects	1 point/hour of project time Up to 11 points/year
Membership in a facility or trades association	1 point/year
Complete and submit a quiz from the BOC newsletter	1 point/passed quiz
Completion of an energy consumption benchmark using Energy Star Portfolio Manager™	3 points/benchmark

### MAINTAINING CERTIFICATION

The continuing education of building operators improves their ability to cope with changing technologies, equipment, and practices.

To remain certified, a building operator must accumulate maintenance points following the date of certification:

- 5 points/year for Level I, and
- 10 points/year for Level II.

Maintenance notices are issued annually in January.

### EDUCATIONAL PARTNERSHIPS



BOC Level I classes count as continuing education training for LEED® professionals.

BOMI International accepts BOC classes for Continuing Professional Development (CPD) points towards renewal of the professional designations offered by BOMI Institute.



BOC and BOMI award competency credit between BOC Level I & II and BOMI International's Systems Maintenance Technician (SMT) & Systems Maintenance Administrator (SMA) designations.



The American Hotel and Lodging Educational Institute recognizes BOC classes for continuing education for the Certified Engineering Operations Executive (CEOE) recertification program.



### 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 and one supplemental class.

### CORE CLASSES

- BOC 1001 - Energy Efficient Operation of HVAC Systems (2-day)
- 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

- BOC 1007 - Facility Electrical Systems
- BOC 1008 - Operation & Maintenance Practices for Sustainable Buildings
- BOC 1009 - Building Scoping for Operational Improvement
- BOC 1010 - Energy Efficient Ventilation Strategies and Energy Savings Through Energy Recovery
- BOC 1011 - Energy Efficient Strategies and Energy savings through Energy Recovery
- BOC 1012 - High Performance Heating and Cooling Equipment and Energy Savings through Energy Recovery



### EQUIPMENT TROUBLESHOOTING & MAINTENANCE

**BOC Level 2** provides an overview of preventative maintenance, equipment troubleshooting, and diagnostic strategies for energy using systems and equipment.

A Level II course is made up of four core and two supplemental classes.

### CORE CLASSES

- BOC 201 - Preventative Maintenance & Troubleshooting
- BOC 202 - Advanced Electrical Diagnostics
- BOC 203 - Advanced HVAC Troubleshooting & Maintenance (2-day)
- BOC 204 - Advanced HVAC Controls & 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

Full class descriptions available online at [www.theboc.info](http://www.theboc.info)