



## BUILDING SYSTEMS MAINTENANCE CERTIFICATE

The Building Systems Maintenance Certificate (SMC) Program provides in-depth information on key building principles.

By successfully completing this program, you will gain an understanding of HVAC, water treatment and plumbing, and other building systems that work together to provide a comfortable indoor environment.

You will also learn how to use other resources to ensure more energy-efficient and cost-effective operations.

### RELATED DESIGNATIONS

All SMC Program courses can be applied towards earning a Systems Maintenance Technician (SMT®) Designation or a Systems Maintenance Administrator (SMA®) Designation. Please note that students must also meet an experience requirement in order to earn the SMA Designation.

**“I am a graduate of the SMC Program.**

**The education I received taught me a great deal about building automation, energy management, and how systems operate. As a result, my career has improved, and I have helped my company save money.”**

**—Boris Halstead  
SMC Program Graduate**

Enroll by visiting [www.bomi.org](http://www.bomi.org),

or call 1.800.235.BOMI (2664).

## COURSE DELIVERY OPTIONS

The cost and duration of a program

depends on the course delivery  
option(s) you choose.

- Accelerated Review Classroom  
(3-4 days per course)
- Corporate Onsite Instruction  
(varies depending on course)
  - Instructor-Led Online  
(6-15 weeks per course)
    - Self-Study  
(self-paced)
- Semester-Length Classroom  
(varies depending on course)

## COMPETENCY CREDIT

Credit for courses awarded through a  
competency option do not qualify  
for certificate programs, with  
the exception of *Budgeting and  
Accounting* for the PMFP Certificate.

## PROFESSIONAL CREDIT

The courses marked with \*\* are  
approved by the USGBC for 24  
GBCI CE Hours towards the LEED  
Credential Maintenance Program.



## COURSE REQUIREMENTS

In order to earn a Building Systems Maintenance Certificate (SMC), you must successfully complete two required courses and one elective course.

### REQUIRED COURSES

- *Air Handling, Water Treatment, and Plumbing Systems*—Know how to perform common water tests, maintain air-conditioning systems and water services, and inspect fire extinguishers. \*\*

#### Topics Include:

- Fire protection systems, thermal comfort, and indoor air quality
- Water conditioning and treatment
- Plumbing systems

- *Energy Management and Controls*—Evaluate and optimize your current system, know how to integrate new components, and gain the ability to communicate your needs to management. \*\*

#### Topics Include:

- Preventive maintenance measures in energy management
- Automatic, auxiliary and electronic control application
- Cost-benefit analysis of HVAC, electric, and lighting systems

### CHOOSE ONE ELECTIVE COURSE

- *Boilers, Heating Systems, and Applied Mathematics*—Examine the inner workings of operating and maintaining steam, hot water, warm water, and radiant heating systems. \*\*

#### Topics Include:

- Heating system operations
- Mechanical components of heating systems
- Mathematics needed to operate heating systems

- *Refrigeration Systems and Accessories*—Gain the knowledge to operate and maintain reciprocating and absorption refrigeration systems. Understand basic refrigeration cycles and system components. \*\*

#### Topics Include:

- Refrigeration cycles and mechanical components of refrigeration systems
- Systematic troubleshooting
- General maintenance procedures

Based on a recent survey, 98% of BOMI International graduates said that  
our courses have enabled them or their employees to be more efficient.

68% have experienced a decrease in monthly operating expenses,  
energy consumption being the number one cost savings.

Enroll today at [www.bomi.org](http://www.bomi.org).

Canadian students visit [www.bomicanada.com](http://www.bomicanada.com).