

Training Resources for Facilities Professionals

1. American Society for Healthcare Engineering (ASHE)

Website: www.ashe.org





Description: The American Society for Healthcare Engineering (ASHE) is the largest professional group affiliated with the American Hospital Association and serves as the advocate and resource for continuous improvement in healthcare engineering and facilities management for more than 6,000 members. AHSE provides its members with information and education through comprehensive publications and educational programming.

Seminars and Workshops: AHSE offers an annual conference and year-round professional development seminars in a full range of topics, including *Construction, Codes and Standards, Operations and Maintenance, Emergency Preparedness* and more.

Format: Classroom-Based Instruction

Certification: AHSE offers a *Healthcare Construction Certificate Program*, which is a course of study in contemporary healthcare issues related to construction and renovation within the healthcare environment.

Local Chapters:

 Idaho Society for Healthcare Engineering Timm Faulhaber – President	(208) 463-5640 timmfaulhaber@chiwest.com
 Montana Society of Healthcare Engineering Bill Garrett – President	(406) 754-8101 billg@imbio.org
 Oregon Society for Healthcare Engineering John Nickodemus – President	(541) 889-5331 johnnickodemus@chiwest.com
 Washington Society for Healthcare Engineering Tim Heidlebaugh – President	(509) 665-6010 theidlebaugh@cwhs.com

2. Association of Energy Engineers (AEE)

Website: <http://www.aeecenter.org/>

Description: The Association of Energy Engineers (AEE) is a gateway for information on the dynamic field of energy efficiency, energy services, deregulation, facility management, plant engineering and environmental compliance.

Seminars and Workshops: *Energy Procurement, Power Quality, Lighting, Indoor Air Quality and Co-Generation*

Format: Classroom, Internet and Videoconference

Certification: Certified Energy Manager (CEM)

3. Association of Facilities Engineers (AFE)

Website: www.afe.org

Description: The Association of Facilities Engineers (AFE) provides education, certification, technical information and other relevant resources for plant and facility engineering, operations and maintenance professionals worldwide.

Seminars and Workshops: AFE offers an annual conference on operations and maintenance topics for facilities professionals. Review classes for the CPE and CPPM exams are offered at the conference; some local AFE chapters also offer exam review courses. Topics include *Maintenance Management, Preventive Maintenance, Inventory and Procurement, Work Orders-Work Flow-Planning and Scheduling, CMMS, Training and Work Cultures, Predictive Maintenance, Reliability Centered Maintenance, Total Productive Maintenance, and Maintenance Financials and ROI.*

Format: Classroom-Based Instruction

Certification: AFE offers two certifications: Certified Plant Engineer (CPE®) and Certified Plant Maintenance Manager (CPPM).

4. BetterBricks Daylighting Labs

Website: <http://www.betterbricks.com/default.aspx?pid=lightinglabs>

Description: To simulate the effects of sunny and overcast days on a design, the BetterBricks Daylighting Labs offer services in conjunction with the Architecture Programs of the University of Washington and the University of Oregon. Three Daylighting Labs are now in operation – at the University of Oregon in Eugene and downtown Portland, and at the Lighting Design Lab in Seattle. These labs provide daylighting education, consulting and laboratory services for commercial building professionals. Features include a mirrored box sky and heliodor, computers and graphic design tools, model and prototype shop and storage, field instrumentation, exhibit space, group and individual work and assembly space and a library.

Format: Tours, Library and Exhibits

Certification: None

5. Building Commissioning Association (BCA)

Website: <http://www.bcxa.org/>

Description: The Building Commissioning Association (BCA) promotes building commissioning practices that maintain high professional standards and fulfill building owners' expectations.

Seminars and Workshops: *Commissioning Benefits, Process and Performance*

Format: Classroom

Certification: Training and certification for commissioning providers is available in selected areas around the country.

6. Building Operator Certification (BOC)

Website: <http://www.theboc.info/>

Description: Building Operator Certification (BOC) offers professional development for facility O&M staff responsible for institutional and commercial buildings. Certification is competency-based and offered at two levels – I and II. *BOC Level I* emphasizes energy-efficient building maintenance practices, while *BOC Level II* emphasizes equipment troubleshooting and maintenance for energy savings.

Seminars and Workshops: *Building Systems Overview, Energy Conservation Techniques, Facility Electrical Systems, HVAC Systems and Controls, Efficient Lighting Fundamentals, Maintenance and Related Codes, and Indoor Air Quality*

Certification: BOC certification is recognized by employers in seventeen states.

7. Building Owners and Managers Association (BOMA)

Website: www.boma.org

Description: The Building Owners and Managers Association (BOMA) University offers a variety of courses and programs designed to enhance and advance the careers of real estate professionals. Courses are offered in a variety of media – traditional seminars and courses, online seminars and audio seminars. Local chapters are in Portland, Seattle and Spokane.

Format: Internet, Classroom and Telephone

Certification: BOMI (BOMA education affiliate) offers Real Property Administrator (RPA), Facilities Management Administrator (FMA), Systems Maintenance Administrator (SMA) and Systems Maintenance Technician (SMT) certifications.

8. Federal Energy Management Program (FEMP), U.S. Department of Energy (DOE)

Website: <http://www.eren.doe.gov/femp>

Description: The Federal Energy Management Program (FEMP) provides training and guidance to help federal energy managers achieve the goal of 15% energy savings in all federal buildings by the year 2005.

Classes and Education Programs: *Utility Deregulation Impacts and Utility Financing, Water Resource Management, Energy Management, Energy Fundamentals, Mechanical Systems, Electrical Systems, Energy Codes and Standards, Energy Accounting, Energy Conservation Opportunities, Buying Energy Efficient Products, Life-Cycle Costing and Designing Low-Energy Buildings*

Format: Distance Learning, On-Line Training, Classroom Training and Telecourses

Certification: None

9. International Facility Management Association (IFMA)

Website: <http://www.ifma.org/>

Description: The International Facility Management Association (IFMA) is the premier professional association for facility management (FM). Supporting the largest community of FM professionals in the industry, IFMA membership comprises more than 17,500 facility professionals throughout 50 countries. Their members have a voice in 126 chapters and 14 councils.




Seminars and Workshops: The IFMA offers an annual conference and year-round professional development seminars, including *Introduction to Facility Management* courses in each of the nine *FM Core Competencies, Sustainability, Energy and Emergency Preparedness*.

Format: Classroom-Based and On-Line Courses

Certification: The IFMA offers Certified Facility Manager (CFM) certification to meet the recognized need of the facility management profession for a designation that would not only help FMs gain additional credibility, but also establish increased global

recognition for the profession. The certification covers nine competency areas including *Operations and Maintenance, Human and Environmental Factors, Real Estate, Finance, Technology*, and more.

Local Chapters:

-  Portland, Oregon www.ifmaoregon.org
-  Olympia, Washington www.home.earthlink.net/~ifmasps/index.htm
-  Seattle, Washington www.ifmaseattle.org

10. International Union of Operating Engineers (IUOE)

Website: www.iuoe.org




Description: The International Union of Operating Engineers (IUOE) is a progressive, diversified trade union that primarily represents operating engineers who work as heavy equipment operators, mechanics and surveyors in the construction industry, and stationary engineers who work in operations and maintenance in building and industrial complexes, and in the service industries. Founded in 1896, the IUOE today is the 12th largest union in the AFL-CIO and has 400,000 members in some 170 local unions throughout the United States and Canada. Nearly 100 apprenticeships and training programs ensure that IUOE members are highly trained, highly skilled craft workers.

Seminars and Workshops: Education includes a full range of facilities operation and maintenance topics including traditional boiler and refrigeration operation training and licensing, direct digital controls, and instruction covering many other building and manufacturing systems.

Format: Classroom-based instruction and apprenticeship programs

Certification: Through Local 286, engineers acquire their skills through a formal four-year, Washington State-approved apprenticeship program. While working with journey-level engineers for the on-the-job training component, apprentices must also complete their classroom obligations. Stationary engineers work in hospitals, hotels, high-rise buildings, breweries and bakeries, etc. Two other apprenticeship programs that compliment the Stationary Engineer program are for Facilities Maintenance Mechanics and Warehouseman.

Local Chapters:

-  Auburn, Washington Local 286 (253) 351-9095
-  Gladstone, Oregon Local 701 (503) 650-7701
-  Richland, Washington Local 280 (509) 946-5101



Seattle, Washington

Local 609

(206) 441-8544

11. Lighting Design Lab

Website: <http://www.lightingdesignlab.com/>

Description: The Lighting Design Lab in Seattle, Washington, provides assistance to commercial lighting designers, facility managers and specification writers seeking the most efficient lighting technologies and strategies.

Seminars and Workshops: *Lamp and Ballast Technology, Luminaires and Controls*

Format: Classroom, Tours and Mock-Up Facility

Certification: Prep and continuing education classes for Certified Lighting Quality Professionals and Building Operator Certification.

12. Northwest Energy Education Institute (NEEI)

Website: <http://www.nweei.org/>

Description: The Northwest Energy Education Institute (NEEI), located within the Science Department at Lane Community College, Eugene, Oregon, offers both the BOC and an Energy Management Certification (EMC). EMC teaches a broad spectrum of energy management principles and techniques. The EMC is offered at the University of Oregon in Eugene and requires a stay-in residence on campus.

Training and Workshops: Experts present training in topics such as *Building Energy Use, Glazing, Insulation, Building Envelope, Heating/Cooling, Secondary HVAC, Controls, Central Plant Equipment, Energy Auditing and Operation and Maintenance.*

Format: Classroom, Workplace Project

Certification: NEEI offers both Building Operators Certification and Energy Management Certification.

13. Plant Operations Support Program

Website: <http://www.ga.wa.gov/plant/plantops.htm>

Description: The Plant Operations Support Program is a self-sustaining consortium comprised of state agencies, educational facilities, municipalities and port districts. It provides a clearinghouse for maintenance and plant operations “best practices.” Subscribers receive vital, timely information via quarterly newsletters and online

services, including e-mail, the World Wide Web and list-servers. The program also offers a comprehensive listing of association and academic certification sources.

Seminars and Workshops: Videoconferences on technical, management and professional development topics

Format: Videoconferences, Email, and Internet

Certification: Prep and continuing education classes for Building Operator Certification.

14. Sustainable Building Advisor Certificate Program

Website: http://www.cityofseattle.net/light/conservesustainability/cv5_scc.htm

Description: The Sustainable Building Advisor Certificate Program, a nine-month specialized training program sponsored by Seattle City Light and offered through Seattle Central Community College, is designed to enable graduates to advise employers or clients on strategies and tools for implementing sustainable building. Participants include architects, engineers, tenant and developer representatives, construction and capital project managers, other building industry professionals, and resource conservation specialists.

Format: Nine months of classroom training and on-site tours of sustainable buildings under construction and completed.

Certification: Participants receive a certificate from Seattle Central Community College upon successful completion of course work and project assignments.

15. University of Washington (UW) Facility Management Program

Website: http://www.extension.washington.edu/extinfo/certprog/fam/fam_gen.asp

Description: The University of Washington – Extension offers two certification opportunities in facility management. The first is a three-course facility life-cycle series: *Facility Life Cycle 1, Planning*; *Facility Life Cycle 2, Design and Construction*; and *Facility Life Cycle 3, Relocation and Operational Issues*, which culminates in the *Certificate in Facility Management: Principles*. Completion of the two-course studio series: *Building Systems and Audits* and *Studio 2 – Projects* leads to the *Certificate in Facility Management – Practices*.

Format: Distance Learning

Certification: Two levels of Certification in Facility Management

16. U.S. EPA ENERGY STAR®

Website:

http://estar7.energystar.gov/index.cfm?c=business.bus_internet_presentations

Description: ENERGY STAR® is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency. The program focuses on strategic energy management for businesses and buildings as an effective approach towards continuous improvement of energy performance. ENERGY STAR® provides tools and resources that assist facility professionals develop a customized strategy, strengthen communication with decision makers, and gain recognition for their achievements.

Seminars and Workshops: ENERGY STAR® provides freely available Internet presentations on energy efficiency strategies and its tools and resources. These trainings and workshops include ENERGY STAR® *Portfolio Manager* – a tool to rate and track energy performance in commercial buildings, as well as tools for analyzing energy efficiency investments for income properties, non-profit organizations, and for-profit businesses. A calendar and description of scheduled trainings on these and other topics is available on-line.

Format: Internet

Certification: None

17. Washington Association of Maintenance & Operations Administrators (WAMOA)

Website: www.wamoa.org

Description: The Washington Association of Maintenance & Operations Administrators (WAMOA) is an organization of Educational Facilities Maintenance Professionals in Washington State. Their mission is to promote and foster the highest degree of professionalism in its members engaged in the management of maintenance and operations in educational facilities. Membership is open to all persons responsible for management of educational facilities' maintenance and operations programs.

Seminars and Workshops: WAMOA offers an annual conference and year-round professional development seminars in the topics of *School Facilities Management*, *Maintenance and Operation*, and *Codes and Standards*.

Format: Classroom-Based Instruction

Certification: WAMOA's certification program offers credentials to qualifying school maintenance administrators in three categories, based on education, achievement and experience. To date, 72 WAMOA members throughout Washington State have been

certified as Educational Facilities Masters, Educational Facilities Administrators and Educational Facilities Specialists.