



*Greater efficiency supports patient care.*

**Access energy education and achieve certification through Energy University.**

*All ECM content was independently developed and reviewed to be vendor-, product-, and service provider-neutral.*

## Description



[Energy University](#) is a program of e-learning courses focused on major aspects of energy efficiency. These courses provide the information needed to identify, monitor, and manage energy use in order to find new ways to create simple and effective energy-efficient solutions in any building or structure.

## Project Talking Points

- Energy University offers a free, online education toolset specific to energy efficiency, facility management, and facility operations & maintenance (O&M).
- Energy University offers facility operations staff opportunities to gain continuing education unit (CEU) credits and certifications or simply to learn about how energy systems can work efficiently and sustainably.
- CEUs acquired can be used toward the AHA certifications CHFM (Certified Healthcare Facility Manager) and CHC (Certified Healthcare Constructor).
- Energy University CEUs are also recognized by other industry organizations such as International Facility Management Association (IFMA), Building Owners and Managers Association (BOMA), Association of Energy Engineers (AEE), and Association for Facilities Engineering (AFE). See the [Energy University website](#) for a full list.
- ASHE promotes professional development and continuing education for facility managers and operators and has endorsed three certification tracks in Energy University – Facility Manager, Energy Manager, Technician/Mechanic.
- Energy University provides automatic reminders to help users complete in-session coursework.
- The training and education Energy University offers increases the value and efficiency of staff working on energy issues with little to no investment cost.
- Energy University provides cross-training for staff on various infrastructure systems for improved results.
- Continuing education encourages the professional growth of existing staff, leading to higher job satisfaction and increased staff retention.
- Energy University offers more than 180 courses. Not every ECM has an associated Energy University course and not every course has a connected ECM.

## Triple Bottom Line Benefits

- **Cost benefits:** Reducing costs starts with understanding building systems, energy consumption, and energy management and their relationship to operating costs. Courses elsewhere can cost thousands of dollars, but Energy University offers a comprehensive course list for free.
- **Environmental benefits:** An educated staff creates a culture of energy consciousness that will lessen a facility's impact on the environment. Reducing energy use reduces environmental impacts from energy production.
- **Social benefits:** [Energy University](#) content gives employees a platform for professional growth and improved job satisfaction. An educated and satisfied staff will better serve the organization's ultimate customers – patients.

## How-To

### For staff not seeking certification:

1. Go to the Energy University [College of Energy Efficiency](#) webpage to review the list of available courses. You can click on the course title to learn more about a course, or link to a specific course referenced in a Roadmap energy conservation measure (ECM).
2. Go to the "To register" heading.
3. Register yourself and begin the coursework. At any time after you complete a course, you can print your certificate of completion. You can submit your certificates to receive ASHE CEU credits or credits from other relevant organizations.

### For facility engineering staff seeking certification:

1. Formalize the program by making it a specific part of your department's continuing education program.
2. Create an education task force or make Energy University part of an existing program. Include the VP Facilities/Operations, Facility Director/Manager, or other manager to be the liaison/lead and an administrator who will help administer, track, and monitor staff participation. Check with your facility's human resources department to see if they will track participation in these programs in each employee's file.
3. Choose appropriate courses. Three learning pathways have been created to help each user choose courses that will provide a solid foundation in comprehensive energy management. ASHE has developed pathways through the Energy University course offerings for:
  - *Facility managers:* These courses include topics such as financial analysis of projects, demand response with smart grid, and distributed generation.
  - *Energy managers:* These courses cover subjects such as energy procurement options in regulated and deregulated markets, ways to balance hedging strategies, and methods for measuring and benchmarking energy performance.
  - *Technicians and mechanics:* These are foundational courses on building systems, including sessions on pumps, HVAC systems, fans, compressors, steam systems, and building controls.
4. Identify training requirements versus optional courses. Establish annual goals for coursework completion and include these in staff goals/requirements.

5. Identify and clearly articulate time requirements for taking the courses and provide staff with time to complete the coursework by specified deadlines. Minimum required training hours by certification:

Facility Manager = 13 hours

Energy Manager = 10 hours

Technician/Mechanic = 18.75 hours

6. Have managers promote participation in the certification programs at staff meetings.
7. Recognize individuals as they complete development paths by awarding certificates and marketing skills both internally and externally.
8. Track program performance. Survey participants about their satisfaction with the program. Ask whether the training made a difference in their processes and in facility operations. Provide feedback to the [Sustainability Roadmap](#) so we can work with Energy University to continuously improve the program.

#### **To register:**

1. Visit the Energy University [website](#).
2. Click "Register."
3. Fill out the required information.
4. For first-time users, please take the introductory course to become familiar with navigation of the Energy University platform.
5. If you are not tracking courses for certification, skip this step. If you are tracking courses, review the ASHE Energy University Learning Paths under the Education Resources tab in this ECM.
  - Select one of three paths created by ASHE:
    - Facility Manager Comprehensive Learning Path
    - Professional Energy Manager Comprehensive Learning Path
    - Technician Comprehensive Learning Path
  - Select desired course and follow online instructions.
6. If you need a certificate of completion for any reason, print a certificate from the [www.MyEnergyUniversity.com](http://www.MyEnergyUniversity.com) website when you have completed the course.

#### **Regulations, Codes and Standards, Policies**

Some training and education programs are required by local, state or federal regulations, such as boiler operator, incinerator operator, and HazWopper certifications and DOT (Department of Transportation) training. Check with your organization's human resources department or education coordinator to confirm state or federal requirements. Most of the Energy University requirements are good practice and may become internal policies of your organization. If so, write a formal training policy and include these certification course requirements in your organization's job descriptions.

#### **ECM Synergies**

Energy University courses are listed at the top of the Resources field at the bottom of each ECM. Look for the Energy University icon. Energy University courses are included in the following ECMs (as of May 2013).

- [Establish a baseline for current energy consumption.](#)
- [Retrocommission HVAC controls.](#)
- [Install variable frequency drives on pumps and motors.](#)
- [Practice preventive maintenance of major HVAC equipment.](#)
- [Replace magnetic ballast, T-12, and incandescent lighting fixtures with more efficient fixtures.](#)
- [Set thermostats to balance efficiency and comfort.](#)
- [Evaluate setback of temperature and airflow settings at night.](#)
- [Check and repair thermal envelope.](#)
- [Perform economizer maintenance.](#)
- [Replace air-handling unit \(AHU\) filters regularly.](#)
- [Inspect and repair steam traps.](#)
- [Reevaluate HVAC equipment scheduling.](#)

## **ECM Descriptors**

### **Energy**

**Level: Beginner**

#### **Category List:**

- Strategic Operations
- Training and Education

#### **Improvement Type:**

- Operations and Maintenance

#### **Department:**

- Engineering/Facilities Management

#### **ECM Attributes:**

- Energy
- Optimize Operations

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