

FORM FOR SCORING OF TRAINING RESOURCE TO FULFILL FEDERAL BUILDING PERSONNEL TRAINING ACT (FBPTA) CORE COMPETENCIES

The FBPTA requires Federal building personnel to demonstrate compliance with a set of Core Competencies. The General Services Administration (GSA) accepts submissions for courses, certificates, certifications, accreditations, registrations, licenses, and other qualifications that demonstrate alignment with the FBPTA Core Competencies. GSA will post resources that sufficiently map to FBPTA Core Competency requirements on the FMI webpage (www.fmi.gov) and may incorporate them into the Core Competency Web Tool. The Web Tool allows Federal buildings personnel to immediately claim credit for competencies met by completing approved training. FMI and the Core Competency Web Tool help Federal employees identify appropriate training, and allow Federal agencies to share information on training sources. To qualify for consideration, submitters complete this form describing how a specific training resource, certification / accreditation, license or other resource aligns with FBPTA core competencies through AskFMI@gsa.gov.

Initial Review Conducted By: Maria Fara

Initial Review Submission Completion Date: Januray 10, 2014

Technical Review Conducted By: Maria Fara

Technical Review Submission Completion Date: January 23, 2014

Alignment of Competency with Functional Roles

	Often Aligned with Facility Management roles (24/43 Core Competencies)
	Often Aligned with Building Operations Professional roles (6/43 Core Competencies)
	Often Aligned with Energy Management Role (7/43 Core Competencies)
	Often Aligned with more than one role (6/43 Core Competencies)

1. Please complete the following for each training course submitted for consideration:

Training provider: **General Service Administration**

Provider address information (primary physical location, including address, city, state, zip code):

Provider's primary point of contact for this learning resource (name, primary physical location (if different from provider address information), phone, and email):

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Building Management Specialist
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Title of this training resource: **Shave Energy**

Type of training course: Online course

Does this course provide CEUs (Continuing Education Units) and if so, how many and for what occupation or field?

Learning objective(s) associated with this certificate program course:

- Module 1:**
1. Understand the Motivation for Shave Energy Goals
 2. Recognize the Shave Energy Program Resources
 - Shave Energy Training Program
 - Shave Energy Audit Tools
 - Shave Energy Reference Materials
 - Shave Energy Website
 3. Understand the Program Structure & Process

- Module 2:**
1. Reiterate Program Motivation and Scope
 2. Understand the Factors for Program Success
 3. Understand the National Management Structure
 4. Identify Principles of Strategic Management
 - Status Updates
 - Tracking and Verification
 - Cost Savings Analysis (Optional)
 - Stakeholder Engagement
 - Communication and Collaboration
 5. Understand the Implementation Schedule

- Module 4:**
1. Understand the Motivation for the Summary of
 2. Building Operations (SBO)
 3. Introduce the Components of the SBO
 4. Learn How to Complete the SBO
 5. Learn How to Use the SBO for Analysis
 6. What are the Next Steps?

Module 5:

1. Understand the Motivation for the Space Audit
2. Introduce the Components of the Space Audit Form
3. Learn How to Complete the Space Audit Form
4. Measurement Procedures
5. Indoor Air Quality Control, Lighting Levels
6. Learn How to Use the Space Audit for Analysis
7. What are the Next Steps?

Module 6:

1. Understand the Motivation for the Energy Audit Checklist
2. Introduce the Components of the Energy Audit Checklist
3. Learn How to Complete the Energy Audit Checklist
4. Applying Best Practices
5. Learn How to Use the Energy Audit Checklist toward
6. Implementation

Module 7:

1. Understand the Motivation for the Night Audit
2. Introduce the Components of the Night Audit Form
3. Learn How to Complete the Night Audit Form
4. Identify issues with equipment schedules
5. Learn How to Use the Night Audit Results
6. What are the Next Steps?

Module 8:

1. Understand the Motivation for Verifying the Intake of Outside Air
2. Introduce the Components of the Outside Air Verification Form
3. Learn How to Verify the Intake of Outside Air
 - Measurement Procedures
 - Tool Inputs
4. Learn How to Analyze the Intake of Outside Air
5. What are the Next Steps??

Module 9:

1. Understand the Motivation for the Controls and Sequences Verification
2. Introduce the Components of the Controls and Sequences Verification Form (CSVF)
3. Learn How to Complete the CSVF
4. Learn How to Use the Results of the CSVF
5. What are the Next Steps?

Module 10:

1. Understand the First Steps toward Implementation
2. Understand How to Utilize the Audit Tools
3. Learn How to Effectively Engage the O&M Contractor
 - Coordinate with the Controls Contractor as needed
4. Learn How to Effectively Engage the Building Tenants
5. Understand How to Strategically Affect Change
6. Understand How to Verify the Implementation of Energy Efficiency Measures

Delivery method and learning methods (delivery methods may include online instruction, classroom instruction, or other means, and learning methods could include lecture, group work, essay work, quizzes, or other learning activities): **The process consists of a series of internal audits of the facility. The property managers participate in 10 modules that teach them how to complete the in-house audits and implement changes based on audit findings. Each module is approximately 15 to 25 minutes in duration; it is approximately 6 hours of online training.**

Length of training (in hours): **6 hours**

URL link to information about the training course, content, and/or syllabus: <https://sites.google.com/a/gsa.gov/national-shave-energy-program/reference-materials>

2. Review the course objective(s) that have been submitted as being aligned with required FBPTA performance criteria. Review the learning methods in the course that will support that learning objective(s).

FBPTA Core Competency Area	FBPTA Core Competency	Required FBPTA performance criteria	Based on technical review of learning objectives and skills, does this resource map to the performance criteria?	Initial Review: Are all submission requirements included?	Initial Review: Are descriptions clear and logical?	Initial Review: Are all materials referenced included with the submission?	Technical Review: Learning Objectives Reviewed	Technical Review: Skills Reviewed	Technical Review: Are there any clarifications requested?	If clarification requested, note here	Clarification Response From Provider	Technical Review: Identify other materials submitted	Technical Review: Other Materials Reviewed
1. Management of Facilities O&M	1.1 Management of Building Systems	1.1.1.Demonstrate familiarity with Building Systems.	Partial. This course received partial credit because it covers only knowledge of HVAC systems. From review of the course material, the course does not include content on Electrical (and Standby generators), Mechanical/Plumbing (and Fire protection systems), Vertical transportation, Structural, Roofing, Building Envelope.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		1.1.4.Demonstrate ability to work with Facilities Team to establish practices and procedures.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to work with Facilities Team to establish practices and procedures.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		1.1.6.Demonstrate ability to monitor and evaluate how well building systems perform.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to monitor and evaluate how well building systems perform.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
2. Performance of Facilities O&M	2.1. Operating and Maintaining HVAC Systems	2.1.1.Demonstrate ability to collect Operating Data on system.	Partial. Based on the review of the learning objectives and the skills/materials covered, the course is awarded credit for the ability to read required: pressures, temperatures, control panels and other operating parameters as required (using gauges, meters and computer systems as necessary), but does not cover checking oil levels and other required levels, or logging equipment reading and report any inconsistencies ability to collect Operating Data on system.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		2.1.2.Demonstrate ability to adjust System Parameters as required.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should cover the ability to adjust System Parameters as required.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		2.1.3.Demonstrate understanding of indoor air quality and how to test and adjust it.	Partial. This course received partial credit because it covers only knowledge of indoor air quality relative to energy saving such as Co2 measurements and system balancing ventilation. From review of the course material, the course does not include content on air pollutant sources, biological contaminants, and mold and related control strategies.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		2.1.4.Demonstrate ability to analyze HVAC system performance.	Partial. Based on the review of the learning objectives and the skills/materials covered, the course is awarded credit for the ability to analyze HVAC system performance from an energy perspective. The course does not cover the full intent of the performance criteria relating to overall HVAC performance. As the performance criteria is intended primarily for building operators, it does not provide information to the level required for a building operator.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		2.1.5.Demonstrate ability to coordinate HVAC system changes.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should cover the ability to coordinate HVAC system changes.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		2.1.8.Demonstrate knowledge and ability to optimize HVAC controls.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should cover the ability to optimize HVAC controls.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes

	2.2. Operating and Maintaining Electrical and Mechanical Systems	2.2.1. Demonstrate knowledge and ability with Lighting Systems.	Partial. This course received credit because the course provides general knowledge of lighting systems. However, as the performance criteria is intended primarily for building operators, it does not sufficiently provide information about how to replace lamps, replace ballasts, maintain lamps and ballast inventory.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
2. Performance of Facilities O&M	2.5. Best Practices and Innovation	2.5.1. Demonstrate knowledge of the "Ten Steps to Operational Efficiency" – FEMP O&M Best Practices Guide Rev 3.0 pg 291. (http://www1.eere.energy.gov/femp/pdfs/omguide_complete.pdf)	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of the "Ten Steps to Operational Efficiency" – FEMP O&M Best Practices Guide Rev 3.0 pg 291.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
3. Technology	3.1. Technology Solutions	3.1.6. Demonstrate ability to recommend and communicate policies. Establish practices and procedures.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should include the ability to recommend and communicate policies. Establish practices and procedures.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
3. Technology	3.2. Building Automation Systems (BAS)	3.2.1. Demonstrate knowledge of a Building Automation System (BAS) and Maintenance Management Systems (MMS)	Partial. This course is awarded credit for general knowledge of BAS, control strategies, and monitoring, analyzing and reporting trends. However, the course does not cover how equipment is entered into BAS, monitoring and implementing overrides and alarm procedures when necessary, or how BAS and MMS inter-relate for operations and accounting systems.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
4. Energy Management	4.1. Systems and Demand Reduction	4.1.1. Demonstrate knowledge of building systems and how they affect energy use	Partial. This course is awarded credit for knowledge of the following systems and how they affect energy use: HVAC, electrical, lighting, and building envelope. However, the course does not cover motors and drives, or fuel systems.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
		4.1.5. Demonstrate knowledge of Building Automation Systems (BAS) and Control Systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should include the knowledge of Building Automation Systems (BAS) and Control Systems.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
		4.1.8. Demonstrate knowledge of re-programming current systems and expanding network of sensors and control devices to optimize HVAC, lighting, and other automated systems.	Partial. Based on the review of the learning objectives and the skills/materials covered, the course is awarded credit for providing a general knowledge of BAS and control strategies to optimize system performance. However, as the performance criteria is intended primarily for energy managers, it does not provide information to the level required for an energy manager.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
		4.1.9. Demonstrate knowledge of how to incorporate occupancy sensors, task lighting, and thermostatic set-points with weather forecasting and other demand linked strategies to optimize building performance.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of how to incorporate occupancy sensors, task lighting, and thermostatic set-points with weather forecasting and other demand linked strategies to optimize building performance.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes	
	4.2. Assess Initial Conditions Program Management	4.2.1. Demonstrate knowledge of how to perform an Energy Savings Assessment http://www1.eere.energy.gov/femp/program/om_wgresources.html	Partial. This course received credit for role of energy audits and utility bill analysis. This course teaches how to perform an Energy Audit, but does not provide information about the various types of energy audits or utility bill analysis.	Yes	Yes	Yes	Yes	Yes	No				Course syllabus and modules	Yes
		4.5.5. Demonstrate knowledge and ability to identify and develop low-cost and no-cost energy efficiency opportunities.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to identify and develop low-cost and no-cost energy efficiency opportunities.	Yes	Yes	Yes	Yes	Yes	No				Course syllabus and modules	Yes
		4.5.6. Demonstrate knowledge and ability to provide operational support to energy management control systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the course should include the knowledge and ability to provide operational support to energy management control systems.	Yes	Yes	Yes	Yes	Yes	No				Course syllabus and modules	Yes

	4.5. Planning, Project ar	4.5.7.Demonstrate knowledge and ability to develop and assist in project identification and justification.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge and ability to monitor facility energy projects.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
		4.5.9.Demonstrate knowledge and ability to monitor facility energy projects.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge and ability to monitor facility energy projects.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes
11. Leadership and Innovation	11.4. Enterprise Knowledge and Strategic Decision Making	11.4.1.Demonstrate knowledge of "continuous retuning" and the potential savings represented by a government-wide shift to this operating mode.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of "continuous retuning" and the potential savings represented by a government-wide shift to this operating mode.	Yes	Yes	Yes	Yes	Yes	No			Course syllabus and modules	Yes