

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:

Initial Review Submission Completion Date:

Technical Review Conducted By:

Technical Review Submission Completion Date:

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:

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):

Title of this training resource:

Type of training 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:

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):

Length of training (in hours):

URL link to information about the training course, content, and/or syllabus:

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
		1.1.1.Demonstrate familiarity with Building Systems.	Partial. The course maps to HVAC, electrical, and lighting systems only.	Yes	Yes	Yes	Yes	Yes	Yes	This material maps to the majority of buildings systems listed, but does not address Mechanical/Plumbing (and Fire Protection), Vertical transportation, Structural, Roofing, Building Envelope. Does your course include these items? If yes, provide the course content relevant to these criterias.	<ul style="list-style-type: none"> • Apply an energy management plan to your building's systems • Evaluate new systems with a concentration on retrofitting • Describe traditional and alternative energy systems and their integration with other building systems • Discuss how to use programmable logic controllers and other resources to optimize your system • Develop and present an energy system • Develop, implement, and manage an innovative preventive maintenance program 		

1. Management of Facilities O&M	1.1 Management of Building Systems	1.1.4.Demonstrate ability to work with Facilities Team to establish practices and procedures.	No, based on the review of the learning objectives, the skills/materials covered, and the clarification, this course does not address ability to work with Facilities Team to establish practices and procedures.	Yes	Yes	Yes	Yes	Yes	Yes	Material of Establishing Standard Operating Procedures maps to the performance criteria. Learning objectives do not clearly map. Request clarification on the learning objectives and course content relevant to this specific performance criteria.	<ul style="list-style-type: none"> Apply an energy management plan to your building's systems Evaluate new systems with a concentration on retrofitting Describe traditional and alternative energy systems and their integration with other building systems Discuss how to use programmable logic controllers and other resources to optimize your system Develop and present an energy system Develop, implement, and manage an innovative preventive maintenance program 		
		1.1.6.Demonstrate ability to monitor and evaluate how well building systems perform.	Partial. Based on the scope of this course, partial credit is awarded for demonstration of the ability to monitor and evaluate how HVAC, electrical, and lighting building systems perform. The course does not cover other building systems, such as plumbing, structural and roofing systems.	Yes	Yes	Yes	Yes	Yes	Yes	The learning objectives do not clearly address ability to monitor and evaluate how well building systems perform. Request clarification on the learning objectives and course content relevant to this specific performance criteria. Although the Skill may map, learning objectives do not clearly map.	<ul style="list-style-type: none"> Apply an energy management plan to your building's systems Evaluate new systems with a concentration on retrofitting Describe traditional and alternative energy systems and their integration with other building systems Discuss how to use programmable logic controllers and other resources to optimize your system Develop and present an energy system Develop, implement, and manage an innovative preventive maintenance program 		
2. Performance of Facilities O&M	2.1. Operating and Maintaining HVAC Systems	2.1.2.Demonstrate ability to adjust System Parameters as required.	Yes, based on review of the learning objectives and skills/materials covered, the course should provide learners with knowledge of adjusting system parameters.	Yes	Yes	Yes	Yes	Yes	Yes	The topic, Control Systems Basics, does not clearly address the ability to adjust system parameters. It is not clear that control systems basics would include education on how to adjust system parameters or how to identify needed system adjustments (speaks to the as required element). Request clarification and course content relevant to this specific performance criteria.	<ul style="list-style-type: none"> Check thermostat calibration Adjust thermostat settings Maintain minimum condensing temperature by cleaning and purging Retrofit cooling equipment and change operating conditions Lower condensate temperature Reduce head pressure and/or coolant temperature Add an economizer cycle 	No	No
		2.1.3.Demonstrate understanding of indoor air quality and how to test and adjust it.	Yes, based on review of the learning objectives and skills/materials covered, the course should provide learners with an understanding of indoor air quality and how to test and adjust it.	Yes	Yes	Yes	Yes	Yes	No			No	No
		2.1.4.Demonstrate ability to analyze HVAC system performance.	Yes, based on review of learning objectives and skills/materials covered, this course should provide learners with the ability to analyze HVAC system performance.	Yes	Yes	Yes	Yes	Yes	Yes	The topics, Control Systems Basics, Heating Systems, Cooling Systems, Air Handling Systems, Energy Management Opportunities for HVAC, Ventilation Systems do not clearly address the ability to analyze system performance and specifically conducting performance tests, collecting data, comparing trends and data, and report findings. Request clarification and course content relevant to this specific performance criteria.	<ul style="list-style-type: none"> Check thermostat calibration Adjust thermostat settings Maintain minimum condensing temperature by cleaning and purging Retrofit cooling equipment and change operating conditions Lower condensate temperature Reduce head pressure and/or coolant temperature Add an economizer cycle 	No	No
		2.1.5.Demonstrate ability to coordinate HVAC system changes.	Yes, based on review of learning objectives and skills/materials covered, this course should provide learners with the ability to coordinate HVAC system changes.	Yes	Yes	Yes	Yes	Yes	Yes	The topics, Control Systems Basics, Energy Management Control Systems, Computers, and Microprocessors, Planning and Implementing an Energy Management Program do not clearly address the ability to analyze HVAC performance and specifically HVAC changes or coordination. Request clarification and course content relevant to this specific performance criteria.	<ul style="list-style-type: none"> Check thermostat calibration Adjust thermostat settings Maintain minimum condensing temperature by cleaning and purging Retrofit cooling equipment and change operating conditions Lower condensate temperature Reduce head pressure and/or coolant temperature Add an economizer cycle 	No	No
		2.1.8.Demonstrate knowledge and ability to optimize HVAC controls.	Yes, based on the learning objectives and the skills/materials covered, this course should cover ability to optimize HVAC controls.	Yes	Yes	Yes	Yes	Yes	No			No	No
2. Performance of Facilities O&M	2.5. Best Practices and Innovation	2.5.5.Demonstrate knowledge of metering and sub-metering for energy and water and how they contribute to systems optimization.	Partial. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of metering and submetering, but not for knowledge of how sub-metering contributes to systems optimization.	Yes	Yes	Yes	Yes	Yes	Yes	The topics, Control Systems Basics, Energy Management Overview, do not clearly address the knowledge of metering and sub-metering for energy and the topics do not address water meters. Request clarification and course content relevant to this specific performance criteria.	<ul style="list-style-type: none"> Demand charges--kW usage is measured by special utility metering equipment Submetering offers a way for landlords to earn a profit by charging tenants a higher rate than the landlord pays the utility Types of submetering Calculating balances 	No	No

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. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of a Building Automation System (BAS), but not for knowledge of Maintenance Management Systems (MMS).	Yes	Yes	Yes	Yes	Yes	Yes	The topics, Energy Management Overview, Control Systems Basics, Energy Management Control Systems, Computers, and Microprocessors, Planning and Implementing an Energy Management Program, do not clearly address how to monitor and implement overrides and alarm procedures; how to monitor, analyze, and report trends; or how BAS and MMS inter-relate for operations and accounting systems. Request clarification and course content relevant to this specific performance criteria.		No	No
		4. Energy Management	4.1. Systems and Demand Reduction	4.1.1. Demonstrate knowledge of building systems and how they affect energy use	Partial. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of HVAC, electrical, and lighting systems and how they affect energy use only. It does not cover other building systems such as motors and drives, building envelope, and fuel systems.	Yes	Yes	Yes	Yes	Yes	Request clarification. This material maps to the majority of buildings systems listed, but does not address building envelope and fuel systems. Does your course include these two items? If yes, provide the course content relevant to these two criterias.	<ul style="list-style-type: none"> Performance maintenance measures for energy management cooling systems Other EMOs for cooling systems Conduct a load survey Install load shedding equipment Install power factor correction capacitors Motor operations: tighten belts and pulleys, lubricate drives frequently to reduce friction, use the highest efficiency motor possible Lighting controls Luminaire dirt depreciation Retrofit and replacement of lighting systems Retrofit of lighting controls 	No
	4.1.5. Demonstrate knowledge of Building Automation Systems (BAS) and Control Systems.	Yes, based on the learning objectives and the skills/materials covered, this course should cover knowledge of BAS and control systems.		Yes	Yes	Yes	Yes	Yes	No			No	No
	4.1.7. Demonstrate knowledge of Energy Management Systems (EMS) and Energy Information Systems (EIS).	Yes, based on the learning objectives and the skills/materials covered, this course should cover knowledge of EMS and EIS.		Yes	Yes	Yes	Yes	Yes	No			No	No
	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.	Yes, based on the learning objectives and the skills/materials covered, this course should cover knowledge of re-programming current systems and expanding network of sensors and control devices to optimize HVAC, lighting, and other automated systems.		Yes	Yes	Yes	Yes	Yes	Yes	The topics, Energy Management Opportunities for HVAC, Planning and Implementing an Energy Management Program, and Calculating the Financial Value of an EMP, do not clearly address knowledge of re-programming current systems and expanding network of sensors and control devices to optimize HVAC, lighting, and other automated systems. Request clarification and course content relevant to this specific performance criteria.	<p>Discuss how to use programmable logic controllers and other resources to optimize your system. The course covers how to set up monitoring and controls to assess system performance and modify controls settings.</p> <ul style="list-style-type: none"> Check thermostat calibration Adjust thermostat settings Lower condenser temperature Keep discharge water temperature high Add an economizer cycle Lighting controls Switching controls Dimming controls Integrated microprocessor-based controls 	No	No
4. Energy Management	4.4. Coordinate with Public Utilities	4.4.1. Demonstrate knowledge of utility service providers for facility (ies).	Partial. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of utility providers. This performance criteria is intended to be agency specific and the utility providers specific to those agencies.	Yes	Yes	Yes	Yes	Yes	No			No	No
		4.5. Planning, Project and Program Management	4.5.2. Demonstrate knowledge and ability to develop a metering Program.	Yes, based on the learning objectives and the skills/materials covered, this course should cover developing a metering plan.	Yes	Yes	Yes	Yes	Yes	No			No
4. Energy Management			4.5.5. Demonstrate knowledge and ability to identify and develop low-cost and no-cost energy efficiency opportunities.	Partial. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of low cost and no cost energy efficiency opportunities for HVAC systems.	Yes	Yes	Yes	Yes	Yes	Yes	The topic, Energy Management Opportunities for HVAC, addresses the performance criteria but limits itself to energy efficiency opportunities to HVAC. Request clarification if other energy efficiency opportunities, such as lighting, are included.	<p>LO 6.1--Identify preventive maintenance measures and other EMOs for heating systems.</p> <p>LO 6.3--Apply various EMOs to improve cooling system performance.</p> <ul style="list-style-type: none"> Keep boiler tubes clean Use blowdown controls Improve combustion efficiency Check thermostat calibration Adjust thermostat settings Clean and purge the system Lower condenser temperature 	No

6. Design	6.2. Infrastructure Systems	6.2.1.Demonstrate knowledge and understanding of the design basis of all applicable Architectural and Engineering Systems.	Partial. Based on the scope of this course, partial credit is awarded for demonstration of general knowledge of the design basis of HVAC, electrical, and lighting systems only. It does not cover other building systems noted in the performance criteria.	Yes	Yes	Yes	Yes	Yes	Yes	This material maps to the majority of buildings systems listed, but only covers HVAC, lighting, and electrical systems. Does your course include the other items? If yes, provide the course content relevant to these criterias.	<ul style="list-style-type: none"> Mechanical compression refrigeration systems, absorption chiller systems, cool storage systems Single-duct/single-zone systems, dual-duct systems, multizone systems, terminal reheat systems Overhead lighting, uniform lighting, nonuniform lighting, task lighting, daylighting, outdoor lighting Electric power distribution system components: building voltages, primary voltages, secondary voltages, distribution circuits 	No	No
11. Leadership and Innovation	11.3. Innovation	11.3.1.Demonstrate knowledge and ability to investigate ways to improve facility services.	No, based on the review of the learning objectives, the skills/materials covered, and the clarification, this course does not address knowledge and ability to investigate ways to improve facility services.	Yes	Yes	Yes	Yes	Yes	No			No	No
		11.3.2.Demonstrate knowledge and ability to assess risks and opportunities.	No, based on the review of the learning objectives, the skills/materials covered, and the clarification, this course does not address knowledge and ability to assess risks and opportunities.	Yes	Yes	Yes	Yes	Yes	No			No	No