

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: December 9, 2013

Technical Review Conducted By: Angela Lewis

Technical Review Submission Completion Date: December 17, 2013

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: Department of Energy, Federal Energy Management Program (FEMP)

Provider address information (primary physical location, including address, city, state, zip code): Department of Energy, Federal Energy Management Program, 5E-089, Forestal Building, 1000 Independence Avenue, Washington, D.C. 20585

Provider's primary point of contact for this learning resource (if different from provider address information), phone, and email): Beverly Dyer 202-586-7241, beverly.dyer@ee.doe.gov.

Title of this training resource: FEMP10: Building Automation Systems for Existing Federal Facilities

Type of training course: web-based training

Does this course provide CEUs (Continuing Education Units) and if so, how many and for what occupation or field? CEUs are offered as follows: American Institute of Architects offers 3.0 Continuing Education Hours, and FEMP offers 40 CEUs for this course.

Learning objective(s) associated with this certificate program course: Learning objective(s) associated with this training course: By completing this course the learner will demonstrate the skills to:

- apply GSA Smart Building Standards for open, converged, and normalized building automation
- integrate existing systems through open communication protocols
- make decisions on critical BAS functionality as it applies to efficiency and cost cutting, indoor environmental quality, operations and maintenance, and safety and security.
- identify results-oriented objectives in the development of an RFP
- develop a design plan including sequences of operations, control strategies, schematics, and point lists
- apply Federal and industry standards and guidance related to BAS
- develop RFPs for BAS design and installation
- consider financing mechanisms for the BAS
- maximize the installed BAS to improve overall efficiency

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): This is a web-based training course divided into 5 learning modules. Methods of instruction include use of advance organizers and review at the end of each module, short video lectures by an expert instructor, narrated information supported by visual reinforcement, interactive exercises, visual displays of information supported by roll-over text, links to more in-depth information, etc.

Length of training (in hours): Varies by learner but approximately 4 hours

URL link to information about the training course, content, and/or syllabus: <http://www.wbdg.org/education/femp10.php>

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
21	Systems (BAS)	3.2.1. Demonstrate knowledge of a Building Automation System (BAS) and Maintenance Management Systems (MMS)	Partial. This course received partial credit because it covers how to monitor and implement overrides and alarm procedures and trending. The course does not cover entering data into the BAS or the interrelationship between BAS and MMS.	Yes	No	Yes	Yes	Yes	Yes	Request clarification. It is not clear that the learning objectives and skills and materials covered address performance criteria 3.2.1. Although the course includes information about writing control sequences and GSA smart building standards, it is not clear what is included about the GSA smart building standards. Do the standards, and how they are discussed within the course include any of the following: 1) how equipment is entered into the BAS? 2) How to use the BAS to monitor and implement overrides and alarm procedures? 3) Information about trend reports? Please additionally clarify if the content about diagnostics includes information about overrides, alarm procedures and/or trend reports. Finally, please clarify if the course includes information about how the BAS and MMS interrelate for operations and accounting systems. Please also note that the last sentence of the learning methods for this performance criteria is incomplete.	Smart Building standards focus on Open, Converged and Normalized and are covered throughout the course. See Module 2: Screens 6-8, 10 for preliminary cussion that is continued throughout the course. 1) Since we are not dealing with a specific type of BAS, this course does not cover how to enter equipment into BAS. It does extensively cover the various types of systems and equipment that may be integrated by BAS, with a focus on legacy systems in existing buildings following GSA Smart Building Standards. 2) Overrides are discussed as a major factor in failing to maximize the BAS investment. See Module 5: Screens 3 and 7. Alarms are discussed in Module 2 Screens 20-21 and Module 5.10. 3) Diagnostics and trending are discussed in detail in Module 2: Screen 15, Module 3: Screen 16; Module 5: Screen 8. This course does not discuss the ability to interrelate a BAS and MMS. The last sentences is: The focus is on using BAS for diagnostic purposes, including limiting demand, maximizing occupancy scheduling, and diagnosing equipment problems.	Course material provided in the link	Yes

3. Technoec	3.2. Building Automation S	3.2.2. Demonstrate understanding of the bridge between the technical and business aspects of facilities management.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should provide the learner with knowledge to demonstrate an understanding of the bridge between technical and business aspects of facilities management.	Yes	Yes	Yes	Yes	Yes	No			Course material provided in the link	Yes
		3.2.3. Demonstrate ability to conduct trouble-shooting procedures at the equipment, system, and building levels.	Yes, based on review of the learning objectives and the skills/materials covered, the topics listed should provide the learner with an ability to conduct troubleshooting at the equipment, system and building level.	Yes	Yes	Yes	Yes	Yes	Yes	Request clarification. Although diagnosing is mentioned as a course topic, it is not clear how much information is provided on this topic. Specifically, please clarify what content within the course addresses trouble-shooting procedures for all three levels of a building, the equipment, systems and building levels.	Module 2: Screens 13-33 provide an in-depth discussion of how BAS can be used to troubleshoot, monitor, diagnose and trend in specific functions within Energy Efficiency, Cost Cutting, Operations and Maintenance, Indoor Environmental Quality, and Safety and Security. Monitoring at the equipment, building, system, and campus-levels are discussed throughout the course.	Course material provided in the link	Yes
		3.2.4. Demonstrate ability to conduct trouble-shooting of critical systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should provide the learner with knowledge to demonstrate an ability to conduct troubleshooting of critical systems, including access control, fire alarms, elevators and lighting.	Yes	Yes	Yes	Yes	Yes	Yes	Request clarification. From review of the learning objectives and skills and materials covered, it is not clear that the course addresses any of the following critical systems: access control systems, fire alarm and suppression systems, elevator systems, emergency lighting systems and emergency communication systems. Similarly to performance criteria 3.2.3, it is not clear how the course provides information about trouble-shooting.	Module 2: Screens 13-33 provide a discussion of BAS capabilities, including access control (with a detailed scenario), fire alarms, elevators (included in a detailed scenario), and lighting. See Module 3 for detailed scenarios on BAS capability. Building Automation Systems are designed to provide alarms, reports, and trends to help troubleshoot all systems and equipment. This critical feature is discussed throughout the course.	Course material provided in the link	Yes
4. Energy Management	4.1. Systems and Demand Reduction	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 topics listed should include knowledge of building automation systems and control systems.	Yes	Yes	Yes	Yes	Yes	No			Course material provided in the link	Yes