

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: August 30, 2013

Technical Review Conducted By: Kathy Powers

Technical Review Submission Completion Date: September 27, 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: Penn State Facilities Engineering Institute

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: Facility Infrastructure Fundamental Training (FIFT)

Type of training course: Interactive Seminar

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 training course: Gain an understanding as to the characteristics that define a high performance building, while realizing that a high performance building must include the elements of design, construction, operation, and maintenance in order to be Sustainable.

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): Interactive classroom instruction with demonstrations and activities

Length of training (in hours): 24 hours

URL link to information about the training course, content, and/or syllabus: [Course description provided in electronic format](#)

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	
Management of Facilities O&M	1.1. Management of Building Systems	1.1.1. Demonstrate familiarity with Building Systems.	Partial. Based on the review of the learning objectives and the skills/materials covered, and the provider clarification FIFT does not address all of the required building systems included in the performance criteria.	Yes	Yes	Yes	Yes	Yes	Yes	This material maps to some of buildings systems listed, but does not address structural, roofing and building envelope systems. Does your course include these items? If yes, provide the course content relevant to these criteria.	Structural, roofing, and the building envelope are not addressed in the FIFT course.	Course Syllabus	Yes	
		1.1.2. Demonstrate ability to work with Facilities Team to assess a facility's need for building systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate the ability to work with the facilities team to assess a facility's need for building systems.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address the ability to work with the facilities team to assess facility needs. Request clarification and course content relevant to this specific performance criteria.	Class exercises in the FIFT course which are primarily directed toward property managers facilitate interaction amongst the students which include: property manager, architects, engineers.	Course Syllabus	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 demonstrate the ability to work with the facilities team to establish practices and procedures.	Yes	Yes	Yes	Yes	Yes	No				Course Syllabus	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 demonstrate ability to monitor and evaluate how well building systems perform.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		1.1.7. Demonstrate ability to manage corrective, preventive and predictive maintenance.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the Section 2.1 PowerPoint FIFT does demonstrate ability to manage corrective and preventive maintenance but does not address predictive maintenance practices other than BAS.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address ability to manage corrective, preventive and predictive maintenance. Request clarification and course content relevant to this specific performance criteria.	The student is trained to understand how several basic building systems work coupled with the importance of proper monitoring and maintenance such that the building systems remain functional, reliable, and cost-effective. Section 2.1 slides 31 & 25-39; 40-45; 47-50; 59; 68-70.	Course Syllabus and Section 2.1 PowerPoint	Yes

1	1.2 Management of Building Interior	1.1.8.Demonstrate ability to work with Facilities Team to develop emergency procedures for building systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate the ability to work with the facilities team to develop emergency procedures for building systems.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address handling building system emergencies, beyond the operation of emergency power. Request clarification and course content relevant to this specific performance criteria.	The purpose of the FFT is to provide property managers, etc. with a fundamental understanding of emergency systems, emergency system components, and how they function.	Course Syllabus and 1.1, 2.1, 2.2, 3.1 & 3.2 PowerPoint	Yes
		1.2.3.Demonstrate ability to evaluate furniture and equipment performance.	No, based on the review of the learning objective and the skills/materials covered, this course does not demonstrate the ability to evaluate furniture and equipment performances.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address ability to evaluate furniture and equipment performance. Interiors section typically implies Furniture, Fixtures, and Equipment (FF&E), not necessarily building operating equipment. Request clarification and course content relevant to this specific performance criteria.	The FFT building systems, not FF&E.	Course Syllabus	Yes
		1.2.4.Demonstrate ability to manage the maintenance and cleaning of furniture and equipment.	No, based on the review of the learning objective and the skills/materials covered, this course does not demonstrate the ability to manage the maintenance and cleaning of furniture.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address ability to manage the maintenance and cleaning of furniture and equipment. Interiors section typically implies Furniture, Fixtures, and Equipment (FF&E), not necessarily building operating equipment. Request clarification and course content relevant to this specific performance criteria.	The FFT building systems, not FF&E.	Course Syllabus	Yes
	1.4 Management of Other Facility Systems	1.4.2.Demonstrate ability to work with Security Personnel as required.	No, based on the review of the learning objective and the skills/materials covered, this course does not demonstrate the ability to work with security personnel as required.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address ability to work with security personnel as required. It is not clear that a macro level understanding of the importance of converged systems for linking separate security, power and emergency systems would include the ability to work with security personnel. Request clarification and course content relevant to this specific performance criteria.	The FFT student has a macro level understanding of the importance of converged systems for linking separate security, power and emergency systems. The student understands primary & emergency power systems and the elements that are tied into those systems. See 2.1 slides	Course Syllabus and 1.1, 2.1, 2.2, 3.1 & 3.2 PowerPoint	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.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to collect Operating Data on HVAC systems.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	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 topics listed should include ability to adjust System Parameters as required.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		2.1.3.Demonstrate understanding of indoor air quality and how to test and adjust it.	Yes, based on the review of the learning objectives and the skills/materials covered demonstrate understanding of indoor air quality – how to test and adjust.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		2.1.4.Demonstrate ability to analyze HVAC system performance.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate ability to analyze HVAC system performance.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	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 topics listed should include ability to coordinate HVAC system changes.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		2.1.6.Demonstrate knowledge and ability to maintain all HVAC Systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge and ability to maintain all HVAC systems.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		2.1.7.Demonstrate knowledge and ability to repair all HVAC Systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate the knowledge and ability to repair all HVAC systems.	Yes	Yes	Yes	Yes	Yes	Yes	It is not clear that the student is shown the power & value of the data and warnings from the BAS system and supporting systems along with the importance of redundant data in isolating issues. addresses knowledge and ability to repair all HVAC Systems. Request clarification and course content relevant to this specific performance criteria.	Note this is a fundamentals course tailored for property managers, etc. The student is shown the power & value of the data and warnings from the BAS system and supporting systems along with the importance of redundant data in isolating	Course Syllabus and PowerPoint section 2.1 slides 47-73	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 topics listed should include knowledge and ability to optimize HVAC controls.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
	2.2.2.Demonstrate knowledge and ability to change: electrical fuses, control boards, electrical fixtures, and electrical relays.	No, based on the review of the learning objectives and the skills/materials covered, this course does not address knowledge and ability to change electrical fuses, control boards, electrical fixtures, and electrical relays and does not clearly map to the performance criteria. Being taught to respect electrical power and leave maintenance to qualified personnel means they are not learning "ability to change fuses etc."	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes	

2.2. Operating and Maintaining	2.2.6.Demonstrate knowledge and ability to all drains and backflow preventers.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of basic understanding of plumbing systems (which would include drains and BPV's) but does not cover making the repairs themselves.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address knowledge and ability to all drains and backflow preventers. Appears as though course takes a good approach to "plumbing" education by teaching fundamentals of the International Code rather than specific knowledge of drains and backflow preventers. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers who need to understand plumbing devices, their operation, maintenance, and repair - not make the repairs themselves. See section 3.2 slides 28,29,31	Course Syllabus and PowerPoint section 3.2 slides 28,29,31	Yes	
	2.3. Operating, Maintaining and Testing Life Safety Systems	2.3.1.Demonstrate knowledge and ability to operate Fire Alarm panels and test the entire fire alarm system.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of the fire protection system but not how to test it.	Yes	The course agenda and information listed do not clearly address ability to operate Fire Alarm panels and test the entire fire alarm system. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers which trains them to understand fire alarm panels and devices, their operation, maintenance, testing and repair - not perform the tests or make the repairs themselves. See section 3.2.	Course Syllabus PowerPoint section 3.2	Yes						
		2.3.2.Demonstrate knowledge and ability to test the emergency generators.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of emergency generators but not how perform the test or make repairs themselves.	Yes	The course agenda and information listed do not clearly address knowledge and ability to test the emergency generators. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers which trains them to understand emergency generators, their operation, maintenance, testing, and repair - not perform the tests or make the repairs themselves. See section 3.2	Course Syllabus PowerPoint section 3.2	Yes						
		2.3.3.Demonstrate knowledge and ability to test fire pumps and sprinkler systems.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of fire pumps and sprinklers but not how perform the test or make repairs themselves.	Yes	The course agenda and information listed do not clearly address knowledge and ability to test fire pumps and sprinkler systems. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers which trains them to understand the operation and testing of fire pumps and sprinkler systems. See section 3.2	Course Syllabus PowerPoint section 3.2	Yes						
		2.3.4.Demonstrate knowledge and ability to test smoke and heat sensors.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of smoke & heat sensors but not how perform the test or make repairs themselves.	Yes	The course agenda and information listed do not clearly address knowledge and ability to test smoke and heat sensors. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers which trains them to recognize and understand the operation and testing of smoke detectors and heat detectors. See section 3.2	Course Syllabus PowerPoint section 3.2	Yes						
		2.3.5.Demonstrate knowledge and ability to inspect fire extinguishers.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and the PowerPoints FIFT does demonstrate an understanding of fire extinguishers but not how perform the test or make repairs themselves.	Yes	The course agenda and information listed do not clearly address knowledge and ability to inspect fire extinguishers. Clarify the difference between "knowledge and ability to operate" and acquisition of basic knowledge of systems. Request clarification and course content relevant to this specific performance criteria.	This is a fundamentals course for property managers which trains them to recognize and understand the necessity for inspection of fire extinguishers. See section 3.2.	Course Syllabus PowerPoint section 3.2	Yes						
3. Technology	3.1. Technology Solutions	3.1.1.Demonstrate ability to monitor information and trends related to facility management technologies.	Partial. Based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does demonstrate the ability to monitor information and trends related to facility management technologies specifically the BAS but does not address other FM technology specifically IWMS, CMMS, CAFM, and BIM.	Yes	Yes	Yes	Yes	Yes	Yes	This material maps to some of buildings systems listed, but does not address FM technology solutions also include IWMS, CMMS, CAFM, BIM, and other technologies. Does your course include these items? If yes, provide the course content relevant to these criteria.	The FIFT course does not address IWMS, CMMS, CAFM, and BIM.	Course Syllabus	Yes	
		3.1.3.Demonstrate ability to identify evaluation criteria, evaluate, and recommend facility management technologies solutions.	Partial. Based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does demonstrate the ability to monitor information and trends related to facility management technologies specifically the BAS but does not address other FM technology specifically IWMS, CMMS, CAFM, and BIM.	Yes	Yes	Yes	Yes	Yes	Yes	This material maps to some of buildings systems listed, but does not address FM technology solutions also include IWMS, CMMS, CAFM, BIM, and other technologies. Does your course include these items? If yes, provide the course content relevant to these criteria.	The FIFT course does not address IWMS, CMMS, CAFM, and BIM.	Course Syllabus	Yes	
		3.1.4.Demonstrate ability to assess how changes to facility management technologies will impact current infrastructure, processes, and building systems.	Partial. Based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does demonstrate the ability to monitor information and trends related to facility management technologies specifically the BAS but does not address other FM technology specifically IWMS, CMMS, CAFM, and BIM.	Yes	This material maps to some of buildings systems listed, but does not address FM technology solutions also include IWMS, CMMS, CAFM, BIM, and other technologies. Does your course include these items? If yes, provide the course content relevant to these criteria.	The FIFT course does not address IWMS, CMMS, CAFM, and BIM.	Course Syllabus	Yes						
		3.1.5.Demonstrate ability to plan for and oversee the acquisition, installation, operation, maintenance, upgrade, and disposition of components supporting facility management technologies.	No. Based on the review of the learning objectives and the skills/materials covered, this course does not address demonstrate ability to plan for and oversee the acquisition, installation, operation,	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes

		3.1.9.Demonstrate ability to manage corrective, preventive, and predictive maintenance.	Partial. Based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does demonstrate the understanding of corrective, preventive, and predictive maintenance but does not address how to manage it either with or without FM technology specifically IWMS, CMMS or CAFM.	Yes	This material maps to some of buildings systems listed, but does not address FM technology solutions also include IWMS, CMMS, CAFM, BIM, and other technologies. Does your course include these items? If yes, provide the course content relevant to these criteria.	The FIFT course does not address IWMS, CMMS, CAFM, and BIM.	Course Syllabus	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)	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of a Building Automation System (BAS) and Maintenance Management Systems (MMS).	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		3.2.3.Demonstrate ability to conduct trouble-shooting procedures at the equipment, system, and building levels.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to conduct troubleshooting procedures at the equipment, system, and building levels.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	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 include ability to conduct troubleshooting of critical systems.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
4. Energy Management	4.1. Systems and Demand Reduction	4.1.1. Demonstrate knowledge of building systems and how they affect energy use	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of building systems and how they affect energy use.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	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 topics listed should include knowledge of Building Automation Systems (BAS) and Control Systems.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		4.4.7. Demonstrate knowledge of utility emergency procedures and contacts.	No, based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does not demonstrate the understanding of specific utility emergency response procedures.	Yes	The course agenda and information listed do not clearly address knowledge of utility emergency procedures and contacts. Course goals include conversant with contractors & technicians on building systems but does not mention coordination with public utilities.	Specific utility emergency response procedures are not addressed in the FIFT.	Course Syllabus	Yes						
4.4. Coordinate with Public Utilities	4.1. Systems and Demand Reduction	4.1.1. Demonstrate knowledge of building systems and how they affect energy use	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of building systems and how they affect energy use.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	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 topics listed should include knowledge of Building Automation Systems (BAS) and Control Systems.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		4.4.7. Demonstrate knowledge of utility emergency procedures and contacts.	No, based on the review of the learning objectives and the skills/materials covered and the provider clarification FIFT does not demonstrate the understanding of specific utility emergency response procedures.	Yes	The course agenda and information listed do not clearly address knowledge of utility emergency procedures and contacts. Course goals include conversant with contractors & technicians on building systems but does not mention coordination with public utilities.	Specific utility emergency response procedures are not addressed in the FIFT.	Course Syllabus	Yes						
5. Safety	5.1. Basic Requirements	5.1.1. Complete Department and Agency required Safety training that meets or exceeds the requirements of OSHA, General Industry and/or Construction 10 and 30 hour programs.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and PowerPoint slides FIFT does cover the Clean Air Act of 1990 and the ANSI/ASME Elevator Safety Code however this is not the complete Department and Agency required Safety training that meets or exceeds the requirements of OSHA, General Industry and/or Construction 10 and 30 hour programs.	Yes	This material does seem to address Safety & associated regulations. Does your course include these items? If yes, provide the course content relevant to these criteria.	See Section 1.2 HVAC certifications & safety, slides 74-93; section 2.2 elevator safety, slides 85-91	Course Syllabus and section 2.1 slides 74-93; section 2.2 slides 85-91	Yes						
		5.1.2. Complete electrical safety course and be familiar with electrical codes and regulations and best practices.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate complete electrical safety and familiarity with electrical codes and regulations and best practices.	Yes	This material does seem to address Safety & associated regulations. Does your course include these items? If yes, provide the course content relevant to these criteria.	See section 3.2 Electrical (safety) slides 84-102.	Course Syllabus	Yes						
	5.2. Infrastructure	5.2.3. Demonstrate knowledge of ventilation systems and prevention of contaminant introduction and cross contamination.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should demonstrate knowledge of ventilation systems and prevention of contaminant introduction and cross contamination.	Yes	This material does seem to address addresses safety related to potential problems with ventilation systems. Does your course include these items? If yes, provide the course content relevant to these criteria.	See section 1.2 HVAC slides 4,7,68,69, 72,73	Course Syllabus and Section 1.2 slides	Yes						
		5.2.4. Demonstrate knowledge of fire prevention systems in hazardous locations/operations, food preparation areas, and electrical transformers.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include knowledge of fire prevention systems in hazardous locations and operations, food preparation areas, and electrical transformers.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		5.2.5. Demonstrate the ability to manage compliance with NFPA 70E - 2012 for determining incident energy and marking the electrical components for the hazard distance and proper arc rated protective equipment.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to manage compliance with NFPA 70E -2012 for determining incident energy and marking the electrical components for the hazard distance and proper arc rated protective equipment.	Yes	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes

		5.2.8.Demonstrate the ability to ensure proper maintenance of special purpose, unique design or antiquated fire alarm and suppression systems.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to ensure proper maintenance of special purpose, unique design or antiquated fire alarm, and suppression systems.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
		5.2.9.Demonstrate the ability to manage Compliance with elevator inspection requirements.	Yes, based on the review of the learning objectives and the skills/materials covered, the topics listed should include ability to manage compliance with elevator inspection requirements.	Yes	Yes	Yes	Yes	Yes	No			Course Syllabus	Yes
	5.4. Occupant Interface	5.4.5.Demonstrate knowledge of and ability to manage adequate ventilation of work spaces, adequate exhaust and makeup air, no short circuit designs.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and PowerPoint slides FIFT does demonstrate the knowledge of adequate ventilation of work spaces, adequate exhaust and makeup air but not the ability to manage it.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address knowledge of and ability to manage adequate ventilation of work spaces, adequate exhaust and makeup air, no short circuit designs. It is not clear that the student being taught about fundamental health & comfort conditions which include: work space, ventilation, exhaust, & makeup air, addresses the ability to manage adequate ventilation. Request clarification and course content relevant to this specific performance criteria.	The FIFT is intended to provide property managers with a fundamental understanding of work space, ventilation, exhaust, & makeup air, so that they can build upon this knowledge to manage these elements or possess an understanding to manage those who do. See section 1.1 HVAC slides 67-73. Class / Instructor specific case	Course Syllabus and Section 1.1 HVAC slides	Yes
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 review of the learning objectives and the skills/materials covered, the provider clarification and PowerPoint slides FIFT does demonstrate the knowledge and understanding of some of the applicable Architectural and Engineering Systems but roofing, building envelope, windows, telecommunications, interior design & landscape are not part of the FIFT course.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address knowledge and understanding of the design basis of all applicable Architectural and Engineering Systems. It is not clear that introducing the student to the fundamental, code-compliant design & operation of the following building systems: HVAC, electrical, fire protection, & elevators addresses the following building systems: roofing, building envelope, windows, telecommunications, interior design, landscape, and IT systems. Request clarification and course content relevant to this specific performance criteria.	Roofing, building envelope, windows, telecommunications, interior design & landscape are not part of the FIFT course. IT is fundamentally introduced via the BAS presentation in section 2.1 HVAC slides 47-69.	Course Syllabus and PowerPoint slides	Yes
12. Performance Measures	12.2. Acquiring Data	12.2.1. Demonstrate knowledge of the differences between quantitative and qualitative data and how to gather / calculate each.	Partial. Based on the review of the learning objectives and the skills/materials covered, the provider clarification and PowerPoint slides FIFT does demonstrate the knowledge of the differences between quantitative and qualitative data and how to gather / calculate each for building systems such as HVAC but not for overall facility management.	Yes	Yes	Yes	Yes	Yes	Yes	The course agenda and information listed do not clearly address knowledge of the differences between quantitative and qualitative data and how to gather / calculate each. It is not clear that introduction to the BAS and its data mining potential addresses knowledge of the differences between quantitative and qualitative data and how to gather / calculate each. Quantitative data is collected by the BAS and a CMMS/WMS system. Does the class include instruction on a CMMS/WMS system? Request clarification and course content relevant to this specific performance criteria.	CMMS / WMS are not address in the FIFT. However, Quantitative & qualitative data are discussed / presented in class. Ex. Comfort conditions: This space is uncomfortable = qualitative, 80% of the population will be comfortable if the space is adequately ventilated and maintained at 72-75 degrees F and 50% RH = quantitative. Class / Instructor specific discussions include this	Course Syllabus and PowerPoint slides	Yes