In-Building Public Safety Communications Certification

Level III Content Outline

Engineering Technician

The candidates for NICET certification at Level III in In-Building Public Safety Communications should have the knowledge, experience, and advanced skills needed to work in the industry. Working independently, they utilize radio frequency principles and equipment to interpret and evaluate surveys, layout, and manage in-building public safety communication systems. They are responsible for ensuring system evaluation, quality, acceptance, and complete documentation. Level III technicians have at least 5 years of experience in in-building public safety communications.

3.1   Defining the Project Scope

(Questions related to these tasks make up 15-25% of the exam.)

3.1.1 Understand requirements and obtain authorization to proceed from the FCC licensee. [1, 3, 4, 5, 6]

3.1.2 Understand requirements and obtain authorization to proceed from the AHJ. [1, 3, 4, 8]

3.2   Evaluating RF Signal Strength and Quality

(Questions related to these tasks make up 30-40% of the exam.)

3.2.1 Determine and obtain test equipment. [1, 3, 10]

3.2.2 Identify sources of potential RF interferences. [2, 4, 7, 10]

3.2.3 Grade and document RF signal strength and quality test results. [1, 2, 3, 4, 10, 12]

3.3   System Design and Layout

(Questions related to these tasks make up 30-35% of the exam.)

3.3.1 Provide parameters for system design applications. [1, 2, 4, 10, 11]

3.3.2 Validate selected system equipment (BDA and non-BDA solutions). [1, 2, 4, 9]

3.3.3 Plan headend (e.g., physical layout, structural, and architectural construction considerations). [4, 8]

3.3.4 Review and finalize system layout. [1, 2, 4]

3.3.5 Validate bill of materials (BOM). [10]

3.3.6 Execute permit process. [1, 4]

3.4   Performing Commissioning, Acceptance Test, and Maintenance Activities

(Questions related to these tasks make up 5-15% of the exam.)

3.4.1 Complete acceptance process. [1, 3, 4]

July 2022   Footnote number is linked to a reference on the Selected General References listing.