



Water-Based Systems Layout Certification Level I Content Outline

(Updated Exam Release Date: July 8, 2024)

Technician Trainee

The candidates for NICET certification at Level I in Water-Based Systems Layout should have the knowledge, experience, and basic skills needed to work in the industry. Under frequent supervision, they perform limited job tasks. They are learning much like a trainee or entry-level technician about flow tests, field checks, coordination, and data entry. They prepare and clean up drawings and plans and complete basic hydraulic calculations. Level I technicians have at least 6 months of experience in water-based systems layout.

1.1 Safety

(Questions related to these tasks make up 1-7% of the exam.)

- 1.1.1 Obey jobsite safety requirements. 1, 4, 12, 13

1.2 Contract Documents

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

- 1.2.1 Gather information in plans and specifications. 1, 5, 7
1.2.2 Learn scope of contracts (e.g., review bid documents with supervisor).

1.3 Survey Existing Conditions

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

- 1.3.1 Verify simple building plans via field surveys. 1
1.3.2 Obtain simple field data for existing fire protection systems. 1, 7
1.3.3 Identify elements of building construction (e.g., beam and column locations). 1, 5, 11

1.4 Research Codes and Standards

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

- 1.4.1 Review contract code summary. 1, 2, 3
1.4.2 Identify design standards. 1, 2, 3, 6, 7, 8, 9

1.5 System Layout

(Questions related to these tasks make up 53-63% of the exam.)

- 1.5.1 Create a simple sprinkler system layout. 1, 2, 6, 7
1.5.2 Solve basic hydraulic equations. 1, 2, 3, 7
1.5.3 Assist with flow tests. 1, 2, 4, 10
1.5.4 Assist with coordination surveys. 1, 10

1.6 Assemble Submittal Packages

(Questions related to these tasks make up 1-10% of the exam.)

- 1.6.1 Assemble submittal packages. 1

1.7 Project Correspondences

(Questions related to these tasks make up 1-10% of the exam.)

- 1.7.1 Document correspondences with AHJs. 1
1.7.2 Document project correspondences. 1
1.7.3 Assemble documents for closeout packages. 1, 10