



(Updated Exams Release Date: April 27, 2026)
Highway Construction Inspection Certification

Level I Content Outline

Technician Trainee

The candidate for NICET certification at Level I in Highway Construction Inspection should have the knowledge and experience to: Follow simple technical instructions from, provide assistance to, and learn inspection procedures and responsibilities from more experienced transportation construction inspectors and engineers. They have at least 6 months of experience in the inspection and testing of highway construction projects.

1.1 Plans and Specifications

(Questions related to these tasks make up 20-30% of the exam.)

- 1.1.1 Recognize and use standard construction terminology. 1, 4
- 1.1.2 Identify purpose and role of various project documents including plans and specifications. 1, 2
- 1.1.3 Locate and identify information on project drawings, standards, specifications. 1, 8, 9
- 1.1.4 Identify key information in job mix formulas. (verify correct mix) 1
- 1.1.5 Inspect placement of work zone traffic controls, including lane shifts, closures, detours, and construction access points and routes. 1, 2

1.2 Measurement and Surveys

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

- 1.2.1 Identify units of measurement, and show ability to perform calculations or conversions. 1, 5, 8, 9
- 1.2.2 Interpret cut, fill, and offset stakes, survey stakes and markers, and notations. 1, 5

1.3 Tools and Equipment

(Questions related to these tasks make up 6-16% of the exam.)

- 1.3.1 Identify tools and equipment used by inspectors for inspections, testing, and reporting. 1, 4, 5
- 1.3.2 Identify basic tools and equipment used in construction. 1, 3, 4

1.4 Personal Safety

(Questions related to these tasks make up 14-24% of the exam.)

- 1.4.1 Use appropriate personal protective equipment (PPE) for the construction site. 3, 7
- 1.4.2 Identify and report potential safety hazards. 1, 3, 7
- 1.4.3 Identify sources of safety information and requirements. 3, 7

1.5 Site Operations

(Questions related to these tasks make up 20-30% of the exam.)

- 1.5.1 Identify components of work zone traffic control. 2
- 1.5.2 Identify construction activities. 1, 4, 8, 10
- 1.5.3 Identify, and verify the presence of, types of utility markings. 6, 10
- 1.5.4 Verify that correct procedures are followed for sampling fresh concrete determining slump, air content, unit weight, and yield; and making and curing test specimens. 1, 4, 9
- 1.5.5 Identify the differences and properties of soil and aggregate types. 1, 3, 4