



**IMCOM SAFETY INSPECTION OF IN-SERVICE BRIDGES**  
**24 October - 4 November 2022**  
**COURSE APPLICATION ANNOUNCEMENT**



**COURSE DESCRIPTION:** This training course is sponsored by Headquarter Installation Management Command (IMCOM) under the Installation Management College, School of Public Works. With IMCOM, the Engineer Research and Development Center (ERDC) will be conducting a ten-day bridge inspection course as required by AR 420-1. **IT IS MANDATORY FOR ALL ATTENDING STUDENTS TO:**

- TAKE AND SUCCESSFULLY PASS A PREREQUISITE ONLINE CLASS.
- TAKE A MID-TERM EXAMINATION.
- TAKE A FINAL EXAMINATION.

**IF YOU ARE NOT PLANNING ON TAKING ANY OF THE TESTS, PLEASE DO NOT REGISTER FOR THE CLASS!**

**COURSE DATES:**

Begin:	24 October 2022	0800 hours
End:	4 November 2022	1200 hours
Travel Dates:	23 October and 4 November 2022 (afternoon)	

**LOCATION:** Ft. Benning, GA

**APPLICATION:** Enrollment for the class will be limited to 30 students. **Deadline to apply is COB 26 August 2022.** Application to this course is not a guarantee of approval to attend. Once the online registration closes, students will be notified of approval or disapproval.

**TUITION:** The course tuition is free for all approved students. Travel expenses for APPROVED, ATTENDING IMCOM students will be funded by IMCOM. All non-IMCOM approved attendees will be responsible for their travel and lodging expenses.

**Target Audience:** The course is intended for engineers, technicians and structural inspectors involved in inspecting bridges or responsible for administering A-E contracts for bridge inspection. Each garrison with bridges in real property in accordance with Army Regulation 420-1 is to have a minimum of one certified inspector on staff. ALL participants must have met the prerequisite requirements for participation in this course and email the course completion certificate bearing their name to [edgardo.ruiz@usace.army.mil](mailto:edgardo.ruiz@usace.army.mil) or bring the certificate to the first day of class. Students must complete the following prerequisite requirement:

- A) NHI Course 130101: Introduction to Safety Inspection of In-Service Bridges, a 14-hour Web-based training and assessment. ([https://www.nhi.fhwa.dot.gov/course-search?tab=0&key=in+service+bridges&sf=0&course\\_no=130101](https://www.nhi.fhwa.dot.gov/course-search?tab=0&key=in+service+bridges&sf=0&course_no=130101) )

**Class Size:** 30. Each garrison with bridges in real property may nominate at least one candidate.

**Description:** This course is based on the updated "Bridge Inspector's Reference Manual" and will provide extensive hands-on training on the safety inspection of a variety of in-service highway bridges. The course will, as a minimum, cover the following topics:

- a. Bridge Inspection Program.
- b. Review of Basic Concepts.
- c. Safety.
- d. Inspection Documentation.
- e. Inspection and Evaluation of:
  1. Bridge Decks
  2. Common Timber, Steel and Concrete Superstructures
  3. Fracture Critical Bridge Members (identification)
  4. Bridge Bearings
  5. Substructures
  6. Waterways
  7. Underwater Inspection (overview/when required)
  8. Culverts
  9. Structural Inventory and Appraisal (SI&A) data

**Objectives:** Upon completion of the course, participants will be able to:

Discuss the duties and responsibilities of a bridge inspector and define inspection concepts including personal and public safety issues associated with bridge inspections:

1. List the inspection equipment needs for various types of bridges and site conditions.
2. Describe, identify, evaluate, and document the various components and deficiencies that can exist on bridge components and elements.
3. List design characteristics and describe inspection methods and locations for common concrete, steel, and timber structures.
4. Identify and evaluate the various culvert and waterway deficiencies.
5. Discuss the need to inspect underwater portions of bridges.
6. Describe nondestructive evaluation methods for basic bridge materials.
7. Demonstrate how to field inspect and evaluate common concrete, steel, and timber bridges.
8. Satisfy the requirements for training described in the NBIS for individuals in charge of the organizational unit that has been delegated bridge inspection responsibilities and for individuals in charge of a bridge inspection team.
9. Successfully complete a written examination on the material presented with a passing score or 70% or better.

U. S. Code 151, Bridge Inspection Standards led to the establishment of the National Bridge Inspection Standards (NBIS). Originally the standards applied only to bridges on the Federal-aid highway system, but Public Law 95-599 expanded NBIS to apply to all bridges on public roads, including those on U. S.

Army installations. The significant impact of this change to U. S. Army installations is the following additional requirements for bridge inspection:

- a. Twenty-four-month frequency inspections of bridges on public roads.
- b. Specific qualifications for bridge inspection team leaders.
- c. Reporting of bridge inventory and inspection data (using the SI&A Sheet) to the FHWA's National Bridge Inventory (NBI).
- d. Maintain a master list of bridges:
  1. Containing fracture critical members.
  2. Containing underwater members.
  3. Containing unique or special features requiring additional attention.

Satisfactory completion of this course will fulfill the training requirements of the NBIS for a "comprehensive training course" based on the Bridge Inspector's Reference Manual.

If you meet the above requirements, you can complete the nomination form. All nominations will be reviewed and approved by the HQ IMCOM ADTIP Program Manager.

**Point of Contact:**

**ERDC Technical POC**

**Edgardo Ruiz at 601-634-2549 or [edgardo.ruiz@usace.army.mil](mailto:edgardo.ruiz@usace.army.mil)**

**HQ IMCOM ADTIP Program Manager**

**Michael Andres, [michael.r.andres.civ@mail.mil](mailto:michael.r.andres.civ@mail.mil)**