



**COURSE NUMBER**

FHWA-NHI-130105A



**COURSE TITLE**

**Introduction to FRP Materials and Applications for Concrete Structures, WEB-BASED**

Introduction to FRP Materials and Applications for Concrete Structures is designed to assist State Department of Transportation (DOT) construction and maintenance operation staff develop knowledge of the types of FRP Composite material, form, and properties used in the repair and retrofit of concrete structures, as well as versatility in applications of FRP in the repair of concrete structures.

Topics covered in this course include:

Background of FRP material development in bridge applications

Different types of FRP Composite material (Fiber and Resin)

Common concrete superstructure and substructure defects that are candidates for FRP repair and retrofit

Versatility in the application of FRP in the repair and retrofit of common concrete structure defects

Benefits of FRP repairs and retrofits for concrete structures over traditional methods

The success of repairs of concrete structures using FRP Composites is dependent on choosing FRP material suitable for the application. It is essential to develop knowledge of FRP material, properties, and suitable application.

**OUTCOMES**

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

- Describe the application of FRP materials for concrete structures.
- Describe the different methods of repairing and retrofitting concrete structures using FRP materials.

**TARGET AUDIENCE**

This training is appropriate for persons with minimal or no experience in bonded repair and retrofit of concrete structures using FRP Composites, as well as those experienced with using FRP Composite. The course focuses on construction areas, however, bridge designers as well as field personnel will benefit from the content.

**TRAINING LEVEL:** Basic

**FEE:** 2017: \$50 Per Person; 2018: N/A

**LENGTH:** 3 HOURS (CEU: .3 UNITS)

**CLASS SIZE:** MINIMUM: 0; MAXIMUM: 0

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