

**COURSE NUMBER**

FHWA-NHI-132034A

COURSE TITLE**Ground Modification Methods (Full version - 3 1/2 days)**

Ground Modification Methods is a practical training course that provides participants the knowledge and ability to effectively implement the latest ground modification methods and procedures used in connection with transportation related construction.

The course content includes information on the description, history, functions, and categories of ground modification methods; a description of the web-based GeoTechTools technology selection and guidance system, and geotechnology catalog; and a series of stand-alone technical chapters on ground modification method categories. Each category chapter contains lessons that outline- the current practice in design, construction methods and materials, design concepts, costs, and contracting methods and specifications.

The overall goal of Ground Modification Methods is to introduce agencies to state of the practice design tools and construction methods on available ground modification methods to design specialists, generalists, and construction engineers involved in projects with problematic site conditions.

OUTCOMES

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

- List the categories and functions of ground modification methods and techniques.
- Locate criteria to determine the applicability of each ground modification method discussed for a specific project under consideration.
- Describe advantages, disadvantages, and limitations for each ground modification method discussed.
- Describe how GeoTechTools can be used to identify potential applications for ground modification methods for use in transportation facilities.
- Locate and identify required soil and rock properties necessary to perform preliminary design.
- Prepare conceptual and basic designs, and evaluate contractor submitted designs.
- Identify appropriate quality assurance methods for various ground modification methods.
- Summarize key elements of a preferred contracting method.

TARGET AUDIENCE

The primary target audience is agency and consultant bridge/structures, geotechnical, and roadway design engineers; engineering geologists; and consultant review specialists. Additionally, management, specification and contracting specialists, and construction engineers interested in the design and contracting of ground modification methods are encouraged to attend. All attendees should have a basic knowledge of geotechnical engineering. Attainment of an undergraduate degree in civil engineering, geology, or equivalent engineering experience in the highway/transportation field is preferred.

TRAINING LEVEL: Intermediate

FEE: 2018: \$1050 Per Person; 2019: \$1050 Per Person

LENGTH: 3.5 DAYS (CEU: 2.1 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

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