

**COURSE NUMBER**

FHWA-NHI-132013A

**COURSE TITLE****Geosynthetics Engineering Workshop (3-Day)**

This 3-day course, provides training on the appropriate, cost-effective utilization of geosynthetics in transportation applications. The course examines the use of geotextiles, geogrids, pavement edge drains, drainage composites, erosion control materials, sediment control materials, and geomembranes. In addition, instructors also cover applications of filtration, drainage, temporary and permanent erosion control, sediment control, roadway separation, roadway reinforcement, roadway subgrade improvement, pavement overlays, embankments over soft foundations, mechanically stabilized earth walls, mechanically stabilized earth slopes, geomembrane containment ponds, and geomembrane pavement encapsulation.

**OUTCOMES**

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

- List six geosynthetic applications for transportation facilities, construction and maintenance
- Identify types of geosynthetics, and the functions they perform
- Discuss if geosynthetics are a feasible, cost-effective option for construction or maintenance of transportation works
- State and locate general construction procedures and inspection items for geosynthetic installations
- Locate references on geosynthetic materials and geosynthetic applications
- Prepare basic designs for filtration, drainage, temporary and permanent erosion control, sediment control, roadways, pavement overlays, embankments over soft foundations, mechanically stabilized earth walls, and reinforced earth slope transportation applications
- Select appropriate test methods for material properties and design parameters for specific geosynthetic projects, and differentiate between index and performance tests/properties
- Locate and review appropriate materials and construction specifications for geosynthetic projects
- Discuss the need for site specific monitoring or special inspection schemes

**TARGET AUDIENCE**

Federal, State and local transportation personnel (bridge, hydraulic, pavement, geotechnical, construction, and maintenance engineers, and construction inspectors and technicians) involved with design and/or construction of transportation facilities that include earthwork. In addition, public agency and private sector construction engineers and project inspectors responsible for installation, construction monitoring and inspection of geosynthetics installations can attend either course. There are no prerequisites, although prior attendance in FHWA-NHI-132012 Soils and Foundations Workshop is recommended.

**TRAINING LEVEL:** Basic**FEE:** 2017: \$925 Per Person; 2018: N/A**LENGTH:** 3 DAYS (CEU: 1.8 UNITS)**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30**NHI Customer Service:** (877) 558-6873 • [nhicustomerservice@dot.gov](mailto:nhicustomerservice@dot.gov)