Course Number
FHWA-NHI-137051

Course Title
Systems Engineering Fundamentals for ITS

‘Systems Engineering Fundamentals’ is an 8-hour web-based training offered by NHI, the authoritative source in transportation training. This course is an introduction to systems engineering for ITS project managers and project staff. It provides a high-level view of a broad and rich topic area, introducing basic concepts to individuals who are working on ITS projects. The goal is to allow these individuals to understand the benefits of applying systems engineering approaches as a means of developing quality systems. The course covers technical practices such as modeling, prototyping, trade-off analysis and testing, and management practices such as risk assessment and mitigation, which make up “best practices” in the systems engineering arena.

To enroll in this web-based training course, select ‘Add ToCart.’

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

• Define Systems Engineering and its application to ITS
• Describe the system’s life cycle and its relationship to systems engineering
• Develop, derive, and validate requirements for a system
• List the systems engineering tools available to mitigate risk
• Define and apply the concept of earned value as a tracking mechanism
• List three alternative strategies that may be applied to decision making under uncertainty
• Identify where to find appropriate standards for developing ITS projects
• Identify resources that may help project personnel to look at systems as a whole

Target Audience
TBD

Training Level: Basic

Fee: 2020: $0 Per Person; 2021: N/A

Length: 8 HOURS (CEU: .8 UNITS)

Class Size: Minimum: 0; Maximum: 0

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