# Risk Management Center Training DLS-107

Decomposing Potential Failure Modes and Constructing Event Trees for Dam and Levee Risk Assessments





## **Course Overview**

Explore how the U.S. Army Corps of Engineers (USACE) Risk Management Center (RMC) decomposes potential failure modes into discrete events and constructs event tree models to better understand potential failure mode progression and assess risk through Boolean logic. An event tree is a graphical depiction of the sequence of events that lead to failure or breach. It is the most common approach for estimating dam and levee safety risks.

# **Learning Objectives**

By the end of the training, participants will have the expertise needed to:

- Explain and demonstrate the process of decomposing a potential failure mode into discrete events.
- Support the risk estimation of a potential failure mode through the construction, depiction, and analysis of event trees.
- Define and understand the role of project event trees in risk analysis and their construction process.

# **FEATURES**

- · Training with USACE Experts
- Hands-on practice constructing event trees for dam and levee risk assessments
- Collaboration with other engineers and scientists

## **Target Audience**

Journeyman engineers and scientists with 5-15 years of experience involved with semi-quantitative or quantitative risk assessments for dam and levee safety.

### **Format**

Virtual. This course will include lectures and demonstrations from USACE experts as well as hands-on exercises with event trees. A workbook of required materials and online resources will be provided to participants. Participants must join by computer.

# **Contact & Registration**



**Lead Instructor** Adam Gohs, P.E.



## **Prerequisites**

DLS-104, Best Practices in Dam & Levee Safety Risk Analysis, is strongly recommended but not required to participate in this course.



#### Level

Fundamental (100 series) Courses at this level focus on a

Courses at this level focus on defining a basic survey of concepts and content. Fundamental courses are considered introductory and do not require prerequisites.



Professional Development Hours (PDH)



Registration & More Information (Registration subject to availability and is not guaranteed) www.rmc.usace.army.mil/training

