



# NORCAL SHORT COURSE: NAVFAC DM 7.1 & 7.2 WORKSHOP

## TUESDAY, JULY 7 | 8:00 AM – 4:30 PM

**REGISTER**

MEMBER / NON \$400 / \$600

EARLY REG ENDS JUNE 23

***El Macero Country Club - 44571 Clubhouse Dr, El Macero, CA 95618***  
***Breakfast and Lunch Provided***

This workshop will explore the newly revised DM 7.1 & 7.2 using detailed examples that directly apply the methods in the manuals. The examples will highlight important tools present within the manuals and will help familiarize the attendee to the new and revised content. Recognized as important reference material for the California Geotechnical Engineering Exam, the workshop will highlight ways that the NAVFAC manuals can be used to answer exam-related questions and will map sections of the manuals to the particular topics covered by the exam.

### DM 7.1

- Soil and rock classification systems and terminology
- Overview of subsurface exploration techniques and instrumentation
- Overview of laboratory testing techniques for soil and rock
- Calculation of existing stresses and stress distribution below applied loads
- Elastic movement and consolidation settlement and rate
- Seepage and filters
- Slope stability methods and considerations
- Appropriate use of correlations in geotechnical design

### DM 7.2

- Selecting methods to determine shear strength parameters for foundations and retaining structures
- Estimating excavation deformations
- Determining properties of engineered fill during design and after construction
- Use of log-spiral charts and equations for retaining wall design
- Bearing capacity of shallow foundations
- Geotechnical analysis of mat foundations
- Pile design – neutral plane analysis, settlement, and lateral capacity
- Quantification of uncertainty in geotechnical parameters and analysis



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