



*A short course in support of
geotechnical graduate student research
and GGSS activities at UC Davis*



Integrated Site Characterization & Selection of Design Parameters

Overview:

This one-day short course presents an integrated, comprehensive approach to geotechnical site characterization and the selection of parameters for project analysis and design. A review of more than 800 geotechnical insurance claims shows that 45% of claims with payout is attributed to some aspect of the site characterization process. The topics covered in this short course are framed with a comprehensive site characterization approach that spans geologic understanding through to final design. Topics include: claims and risk management; developing a geologic model; identifying mechanisms controlling performance; recommended site investigation practices for clays, silts, and sands; idealization of site conditions and selection of parameters for analysis and design. The course content will be delivered using a series of case studies to illustrate the advantages of employing an integrated site characterization process.

This course is geared toward participants having various levels of familiarity with current site investigation tools (drilling, sampling, in-situ and laboratory testing methods) and the process of site characterization in practice. Coverage of each topic will briefly review the underlying fundamentals, but will focus on recommended best practices and how each component fits into the overall site characterization process with the end goals of improved design, reduced costs, and mitigating risk.

Registration:

The proceeds from this short course will go solely to support unrestricted graduate student research and Geotechnical Graduate Student Society (GGSS) activities at UC Davis. The cost is \$500 for the first participant and \$400 for additional participants from the same organization. Please email Jason DeJong (jdejong@ucdavis.edu) to register in advance or enquire about group rates; enrollment may be limited, so advance registration is recommended.

Your continued support of the Geotechnical Program at UC Davis is greatly appreciated.

Instructors:

Professor Ross W. Boulanger
Professor Don. J. DeGroot
Professor Jason T. DeJong
Mr. Chris Goetz
Professor Pat Lucia

Location:

Activities and Recreation Center (ARC) Ballrooms A&B
University of California
Davis, California
October 23, 2015

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Friday, October 23, 2015

<u>Time</u>	<u>Subject</u>	<u>Lead Instructor/Moderator</u>
8:00 a.m.	Welcome and Introductions	All
8:15 a.m.	Claims & Risk Management for Site Characterization	Lucia
8:45 a.m.	Approach for Integrated Site Characterization	DeJong
9:15 a.m.	Identifying Performance Mechanisms & Preliminary Scenario Assessment	DeJong
9:45 a.m.	Break	
10:15 a.m.	Developing a Project Specific Geologic Model	Goetz
11:15 p.m.	Site Idealization & Selection of Representative Parameters for Analysis	Boulanger
12:00 p.m.	Lunch	
1:00 p.m.	Case Study: Characterization for Construction on Soft Clays	DeGroot
2:00 p.m.	Case Study: Characterization for Slope Stability in OC Clays	Lucia
3:00 p.m.	Break	
3:30 p.m.	Case Study: Characterization for Liquefaction Assessment of Sands & Silts	DeJong
4:30 p.m.	Review and Discussion of Integrated Site Characterization Approach	All
5:00 p.m.	Adjourn for Refreshments	