Probabilistic Seismic Hazards Analysis (PSHA) 2026

Wednesdays, Fridays, Jan 28 - May 15* | 11:00 am - 12:30 pm Pacific | Virtual

REGISTER

Members	$2500
Nonmembers	$3000

Part 1 - Introduction

Class 1
- Class outline
- Introduction to PSHA concepts

Class 2
- Introduction to PSHA concepts (cont)
- Probability Review

Class 3
- PSHA Mathematical Framework

Class 4
- Aleatory Variability and Epistemic Uncertainty

Class 5
- PSHA software and tools

Part 2 - Standard PSHA

Class 6
- Seismic Source Characterization: Faults

Class 7
- Seismic Source Characterization: Zones

Class 8
- Entering SSC logic trees into PSHA software

Class 9
- Introduction to Ground-Motion Characterization

Class 10
- Entering GMC logoc trees into PSHA software

Class 11
- Hazard Results, Disaggregation, and Design Spectra

Class 12
- Conditional Mean Spectra and Conditional Spectra

Class 13
- Risk and Risk-Targeted Ground Motion

Class 14
- What should be included in a PSHA Report

Part 3 - Ground-Motion Models

Class 15
- Median GMM - Scaling from Point-Source Models and constraints from finite-source simulations

Class 16
- Median GMM – Model Complexities
- (regionalization, HW effects, NL site effects)

Class 17
- Components of Aleatory Variability for GM

Class 18
- Near-Fault Effects (directivity, velocity pulses)

Class 19
- Evaluation of Alternative GMMs (logic trees)

Class 20
- Secondary Ground-Motion Parameters

Class 21
- Selection and Modification of Design Time Histories

Class 22
- Selection and Modification of Design Time Histories

Part 4 - Advanced Topics

Class 23
- Probabilistic Fault Displacement Hazard Analysis (PFDHA)

Class 24
- Non-ergodic PSHA (site)

Class 25
- Non-ergodic PSHA (source and path)

Class 26
- Review

Class 27
- Review

Dr. Norm Abrahamson

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University of California Berkeley

CalGeo℠

The California Geotechnical Engineering Association

*Class meets every Wednesday and Friday except Feb 27, March 6, the week of March 23, and April 15.