

## DEEP EXCAVATION CALCULATION AND DESIGN SOFTWARE

***DEEP*EX, *SNAIL*PLUS, *DEEP*FND**

**TUESDAYS, AUGUST 22 & 29 | 9 AM – 1 PM | VIRTUAL**

**REGISTER NOW**

<b>MEMBERS</b>	<b>\$250</b>
<b>NON-MEMBERS</b>	<b>\$400</b>

### CLASS DETAILS

#### ***DEEP*EX: DEEP EXCAVATION DESIGN (6 HOURS)**

This six-hour class will provide an overview of deep excavation design fundamentals. It covers cantilever, single support, and multilevel braced excavation analysis and design, as well as structural wall and support systems, slope stability analysis, finite element analysis, gravity wall systems and abutments, MSE walls, cofferdams, special applications, and dynamic analysis. Additionally, the class will cover citywide models.

#### ***SNAIL*PLUS: SOIL NAIL WALL DESIGN (0.5 HOURS)**

#### ***DEEP*EX: DEEP EXCAVATION DESIGN (1.5 HOURS)**

This class will provide a comprehensive overview of the design of deep foundations. Topics to be covered include axial pile capacity analysis, lateral pile capacity analysis, pile groups, 3D finite element methods, and dynamic analysis. Participants will gain a better understanding of the various design considerations when designing deep foundations and be able to apply these methods in practice.

### SOFTWARE DETAILS (ATTENDEES WILL RECEIVE TEMPORARY LICENSES FOR USE DURING THE CLASS)

#### ***DEEP*EX**

Developed for engineers like you, DeepEX is an innovative, easy-to-use software program for deep excavations. It solves both geotechnical and structural designs for many wall types, including soldier pile walls, sheet pile walls, and diaphragm walls with multiple sections of reinforcement. DeepEX can also perform slope stability analysis with soil nailing. It comes packed with all structural and geotechnical design codes. Hosting 3000 users worldwide, geotechnical and structural engineers in the US, Singapore, Australia, India, Russia, Ukraine, Turkey, Malaysia, and beyond use DeepEX as their preferred tool for deep excavation design.

#### ***SNAIL*PLUS**

SnailPlus is our slope stability analysis and soil nail wall design software. While soil nailing is also available in our DeepEX software program, SnailPlus brings all the necessary capabilities into one package. The software follows the FHWA methodology for the design of soil nail walls in an interactive environment built on the DeepEX basic layout. This means that you can include all intermediate construction stages for your soil nail wall, including 3D loads, in an interactive environment. Last, SnailPlus is the only software that produces a full printable report of all design calculations.

#### ***DEEP*FND**

DeepFND is a powerful, user-friendly program for deep foundations, developed by expert engineers to help you design deep foundations and minimize your risks. It covers all aspects of structural and geotechnical foundation pile design within a superior, interactive environment.

### BIOGRAPHY

Dimitrios C. Konstantakos, PE, is the founder and CEO of Deep Excavation LLC, a developer of user-friendly, high-quality, deep excavation calculation and design software. He is also the current chair of the American Society of Civil Engineers' Earth Retaining Structures Committee. Mr. Konstantakos holds a master of science degree in Civil/Geotechnical Engineering from the Massachusetts Institute of Technology and a BS degree in Civil Engineering from the University of Massachusetts Lowell. He has been involved in the design of bridge foundations, tunnels, deep excavations, finite element simulations, piers and bulkheads, pile foundations, and field inspections. Mr. Konstantakos has also taught Support of Excavation Systems as an adjunct professor at New York University.



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