Quantitative Risk Assessment in Geotechnical Engineering

7:30-8:30 Registration/Continental Breakfast
8:30-8:45 Welcome and Introduction
8:45-10:15 Introduction to Risk Assessment in Geotechnical Engineering
10:15-10:30 Break
10:30-12:00 Introduction to Random Variables
12:00-1:00 Lunch
1:00-2:30 Simple Tools for Probabilistic Analysis
2:30-2:45 Break
2:45-4:15 Simple Tools for Probabilistic Analysis (Continued)
4:15-4:30 More Advanced Tools for Probabilistic Analysis
4:30-5:00 Discussion, Questions, and Wrap-up

The seminar fee includes a continental breakfast, lunch, coffee, 7.0 PDH, and electronic and paper copies of the seminar notes. Participants are encouraged to bring their own laptops, although a laptop is not required to complete the course. Laptops will not be provided on site.

The Geo-Institute highly encourages individuals to register online at http://www.asce-pgh.org. Registrations may also be made by mail. Mail-in registration will not be processed without payment.

For mail-in registration, please send the completed form to the address below for receipt by March 27, 2020 with a check made payable to ASCE Geotechnical Engineering Group.

Attn: Shirley Tang
4 Grandview Circle, Suite 100
Canonsburg, PA 15317
Quantitative Risk Assessment in Geotechnical Engineering

Why you should attend:

After completing this course, you should:

- Understand the rationale for probabilistic geotechnical analysis and risk assessment
- Gain exposure to some methods of probabilistic geotechnical analysis
- Understand the relationship between the Factor of Safety and the Probability of Failure
- See how probabilistic methods can be applied to routine geotechnical design
- Exposure to software for performing geotechnical analysis. Participants are encouraged to bring their laptops
- Run some of the programs provided free of charge to all participants
- Gain awareness of the state-of-the-art in probabilistic geotechnical analysis

Course Instructor

Vaughan Griffiths’s (Ph.D, D.Sc, CEng, FICE, D.GE, P.E., F. ASCE) interests lie in application of finite element and risk assessment methodologies in civil engineering. His numerous research papers include some of the most highly cited in the geotechnical engineering research literature. He is the co-author of three textbooks that have gone into multiple editions including the Chinese language on “Programming the Finite Element Method”, “Risk assessment in Geotechnical Engineering” and “Numerical Methods for Engineers”. He gives regular short-courses on Risk Assessment in Geotechnical engineering for practitioners, with recent offerings in China, New Zealand, Australia, Colombia, Norway, Canada and the USA. Professor Griffiths is a former ASCE Director, an editor of Computers and Geotechnics, and was on the Advisory Panel of Géotechnique from 2012-2018. In 2017, he received the H. Bolton Seed Medal from the ASCE/Geo-Institute and was named the Cross-Canada Lecturer by the Canadian Geotechnical Society.