

## Short Course | Risk Management Applied to Geotechnical Structures (The short course will be in english)

 André Assis, PhD, UAlberta, FEIC, Professor of the Department of Civil & Environmental Engineering at UnB

| Date: november 12, 2024 | Duration: Full Day

| MINIMUM PARTICIPANTS: 15 | MAXIMUM PARTICIPANTS: 30

**FEE: USD 350** 

## **INTRODUCTION/SUMMARY**

The course "Risk Management Applied to Geotechnical Structures" will consist of four sections, each lasting 1 hour and 30 minutes, addressing the following topics:

- Introduction, uncertainties, deterministic and probabilistic approaches, and concepts of engineering risks;
- Qualitative assessment of risk and methods (Risk Matrix, Bow-Tie, FMEA / FMECA, Event Tree and Fault Tree Analyses);
- Quantitative assessment of risk and methods (Monte Carlo, FOSM, PEM etc.);
- Risk management and cases (examples applications to geotechnical structures).

## **SPEAKERS**

## **Andre Assis**

André Assis is Professor of the Department of Civil & Environmental Engineering at the University of Brasilia (UnB), Brazil. He graduated at the UnB (1980), worked as geotechnical engineer (1980-1984) and got his PhD from the University of Alberta, Canada (1990). In 1996-1997, he spent his sabbatical leave at the Mackay School of Mines, Univ. of Nevada at Reno, USA, and in 2005-2006 he was visiting professor at the EPFL (Swiss Federal Institute of Technology Lausanne), in Switzerland. His research interests and consulting are on tunnelling, rock mechanics, rock-fill dams and geotechnical risk management. He has already supervised more than 120 MSc and PhD theses, and published around 300 papers in international and national journals, congresses and symposia. He was president of the Brazilian Tunnelling Committee, CBT (1998-2002) and of the International Tunnelling and Underground Space Association, ITA (2001-2004), chairperson of the ITA Committee on Education and Training (2007-2013) and president of the Brazilian



Society for Soil Mechanics and Geotechnical Engineering, ABMS (2012-2016). Presently, he is Vice President of the ISSMGE for South America and Caribeans, consultant for mining and geotechnical companies, and member of Review Dispute Boards. He is one of the authors of the book Risk Management in Complex Structures.