



Slope stability for 3D slopes

By attending the workshop, you will:

- Get acquainted with the latest tools for modelling surface geotechnical excavations and structures
- Appreciate the subtleties of modelling and monitoring of soil and rock behaviour
- Interact with an experienced international specialist and other geotechnical professionals

Tools Used



RS2

2D Geotechnical Finite Element Analysis



RS3

3D Geotechnical Finite Element Analysis

Location

Masa Square Hotel

New CBD cnr Khama Crescent & Western Avenue, Gaborone, Botswana

Fees

Registration Fee: \$850 USD

Early Bird Fee: \$750 USD
(ends 21 March 2020)

Registration Details:

Lunch, coffee, tea, and refreshments will be provided. Due to space constraints the workshop is limited to 20 participants.

Note:

Participants must each bring their own laptop. Prior to the workshop, Rocscience will provide each participant with free temporary software licenses that are valid for 30-days.

Numerical Modelling of Slopes and Surface Excavations Using RS2 & RS3

Rocscience is pleased to invite you to an upcoming workshop in Gaborone, Botswana, on numerical modelling of slopes, surface excavations and reinforced earth structures. This three-day training workshop, featuring a world-class specialist, is designed for all experience levels. Participants will learn to solve slope stability and surface excavation problems in both soil and rock masses with the Rocscience finite element software tools of RS2 and RS3. The workshop will focus on practical applications.

The workshop will provide an overview of the capabilities and features of the software tools. Through a mix of presentations and “hands-on” tutorials with real-world examples, participants will learn to apply the software to solving geotechnical problems encountered in civil engineering and mining design. Topics to be discussed will include the following:

2D and 3D Numerical Modelling of Slopes and Surface Excavations

- Review of failure modes of soil and rock slopes
- Fundamentals of stress and deformation analysis
- Constitutive laws governing the behaviour of soils and rock masses (material models for geotechnical analysis)
- Overview of the Finite Element Method
- Application of FEM to slope stability (using the Shear Strength Reduction method) and reinforced earth structure analysis
- Development of models (construction of geometry, meshing, application of loads and boundary conditions, and analysis options)
- Modelling of groundwater conditions
- Probabilistic analysis of slopes
- Modelling of support
- Interpretation of stress, strain, displacement and factor of safety results
- Tips and pitfalls of model building



Course Instructor

Reginald Hammah, Ph.D., P.Eng.
Director, Rocscience Africa

Dr. Reginald Hammah holds a Ph.D in Civil Engineering from the University of Toronto and brings over 20 years of experience in rock mechanics and geotechnical engineering. He uniquely blends practical problem-solving experience with software tools and theoretical understanding of excavation behavior. He is well known for breaking down complex problems into simpler, more familiar and solvable components.