GATI

MINING ENGINEERING

Applied Structural Geology in Mining & Exploration

DURATION	CONTACT HOURS	LEVEL	FEE PER DELEGATE
5 days	30	Intermediate	US$1,500

Reading structure in the field and in the model, because structure controls where ore sits and where ground fails.

Structure decides two things that matter commercially: where mineralisation went, and whether the ground will stand up. This week is applied throughout. It covers measuring and interpreting structural data, recognising fold, fault and shear geometries in core and in pit faces, and building a structural model that constrains a resource estimate. Ground control applications close the week, since the structures that host ore are usually the ones that fail.

Available as classroom, live online, in house.

Who it is for

Exploration and mine geologists, geotechnical engineers, resource geologists building models, and mining engineers planning in structurally complex ground.

What you will be able to do

- Measure and record structural data consistently.
- Interpret fold, fault, shear and vein geometry from limited exposure.
- Build a structural model that constrains grade continuity.
- Relate structure to mineralisation controls.
- Apply structural understanding to ground control.

The outline

DAY 1

Fundamentals

Stress, strain and deformation mechanisms · Brittle and ductile behaviour · Measurement conventions and recording

DAY 2

Structures

Folds and their geometry · Faults, displacement and sense of movement · Shear zones, foliation and lineation · Veins and dilation sites

DAY 3

Data and analysis

Oriented core and its pitfalls · Stereonets and structural statistics · Section and level plan interpretation

DAY 4

Ore controls

Structural traps and plunge · Reactivation and overprinting · Targeting from structural reasoning

DAY 5

Ground control

Structurally controlled failure · Wedge and planar analysis · Communicating structure to engineers

What you leave with

- A structural interpretation of a mapped area or core set.
- A stereonet analysis of a real dataset.
- A structural domain model usable in estimation.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Dar es Salaam, Tanzania	**US$1,500**
30 November 2026 to 4 December 2026	Dubai, United Arab Emirates	**US$1,500**
7 to 11 December 2026	Durban, South Africa	**R15,000**
14 to 18 December 2026	Cape Town, South Africa	**R15,000**

Fees are per delegate and co
arranged by the delegate. Reg

Register or ask a question

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This copy was produced on 30 October 2026.