



MINING & MINERALS EXPLORATION TECHNOLOGY (Physical Geology)

DURATION

5 days

CONTACT HOURS

30

LEVEL

Intermediate

FEE PER DELEGATE

R15,000

Earth materials and processes: rocks, minerals, weathering and the landscape they produce.

The physical geology module of the exploration technology series, and the foundation the others stand on. It covers the Earth's structure and the rock cycle, mineral identification by physical property, how igneous, sedimentary and metamorphic rocks form, and the surface processes that weather and transport them. Map and section reading is practised throughout, because a geologist who cannot read a map is working blind.

Available as classroom, live online, in house.

Who it is for

Exploration trainees and technicians, geoscience students, and technical staff who need geological literacy for their own discipline.

What you will be able to do

- Describe the Earth's internal structure and the rock cycle.
- Identify common minerals and rocks by physical property.
- Explain the formation processes behind each rock class.
- Relate weathering and erosion to the landforms they produce.
- Read a geological map and construct a simple cross section.

The outline

DAY 1

The Earth

Internal structure and plate tectonics in outline · The rock cycle · Geological time and relative dating

DAY 2

Minerals

Crystal form, cleavage, hardness and lustre · The rock forming mineral groups · Identification practice on hand specimens

DAY 3

Rocks

Igneous rocks and their textures · Sedimentary rocks and their environments · Metamorphic rocks and grade

DAY 4

Surface processes

Weathering, chemical and physical · Erosion, transport and deposition · Landforms, and their geological meaning

DAY 5

Maps and sections

Map conventions, strike and dip · Constructing a cross section · Field notebook discipline

What you leave with

- A hand specimen identification set completed.
- A geological map interpretation with a cross section.
- A field notebook standard you can keep using.

Published dates

DATES	WHERE	FEE
23 to 27 November 2026	Cape Town, South Africa	R15,000
30 November 2026 to 4 December 2026	Nicosia, Cyprus	US\$1,500
7 to 11 December 2026	Durban, South Africa	R15,000
14 to 18 December 2026	Nairobi, Kenya	US\$1,500

Fees are per delegate and cover all expenses. Registration fees are arranged by the delegate. Reg

Register or ask a question

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