



PETROLEUM GEOSCIENCE AND PETROPHYSICS

Seismic Interpretation in 2D and 3D

5 day course

Classroom, online or in-house

Course overview

Mispicked faults and horizons carried through to a depth map are behind many wells that came in high, low or on the wrong side of a seal. Interpreters who tie their data carefully and test their structural logic avoid them. Delegates begin with well to seismic ties using synthetic seismograms and checkshots, then pick horizons and faults on 2D grids and on 3D volumes using inlines, crosslines, time slices and autotracking. Reflection terminations and seismic facies are interpreted next, followed by structural interpretation in normal, reverse and wrench regimes. Gridding, contouring and time to depth conversion with velocity models complete the workflow. Hands on exercises run on a workstation data set throughout. Delegates leave able to produce a defensible depth structure map and explain the uncertainty attached to it.

What you will learn

- Tie wells to seismic using synthetic seismograms and checkshot data
- Interpret horizons and faults consistently on 2D lines and 3D volumes
- Use time slices, arbitrary lines and autotracking efficiently
- Identify reflection terminations and seismic facies
- Interpret structural styles in extensional, compressional and wrench settings
- Build velocity models and convert time interpretations to depth
- Generate structure and isochore maps with stated uncertainty
- Validate interpretations against well tops and geological plausibility

Who should attend

- Junior and mid career seismic interpreters
- Exploration and development geologists
- Geophysicists moving from processing into interpretation
- Geomodellers who receive interpreted surfaces
- Technical staff at petroleum agencies reviewing operator maps

Course outline

- 01 Interpretation workflow and data loading
- 02 Well to seismic ties
- 03 Horizon picking in 2D and 3D
- 04 Fault interpretation and fault polygons
- 05 Seismic stratigraphy and facies
- 06 Structural styles on seismic
- 07 Velocity modelling and depth conversion
- 08 Mapping, gridding and uncertainty
- 09 Interpretation review and peer assurance

Upcoming dates



Dates	Venue	Format	Fee per delegate
12 to 16 October 2026	Durban, South Africa	Classroom	R19,950
16 to 20 November 2026	Accra, Ghana	Classroom	USD 1,325
8 to 12 February 2027	Online	Online	R8,500
22 to 26 March 2027	Pretoria, South Africa	Classroom	R19,950

Fees and how to register

This 5 day course is **R8,500** per delegate online, **R19,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 1,325** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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