

**DRILLING, WELLS AND RESERVOIR ENGINEERING**

Well Completion Design and Equipment

5 day course

Classroom, online or in-house

Course overview

A completion is installed once and expected to produce for decades, so a wrong tubing size, a packer that cannot be retrieved or a safety valve set at the wrong depth is paid for over the whole field life. Delegates start with the production requirements that set tubing size, then choose between open hole, cased and perforated, gravel packed and multizone architectures. Equipment is covered component by component: tubing hangers and trees, subsurface safety valves, packers, sliding sleeves, nipples, expansion joints and intelligent completion valves. Tubing movement and packer load analysis, material selection for CO₂ and H₂S, and completion and packer fluids are applied to a design exercise. Running procedures and the handover to production close the programme. Delegates leave able to design a completion and specify its hardware.

What you will learn

- Translate reservoir and production requirements into a completion basis of design
- Select tubing size from inflow and outflow considerations
- Compare open hole, cased hole, gravel pack and multizone architectures
- Specify packers, safety valves, sleeves and landing nipples
- Calculate tubing movement and packer loads under changing conditions
- Select completion materials for corrosive service
- Choose completion and packer fluids
- Plan completion running and handover procedures

Who should attend

- Completion engineers
- Drilling engineers who design completions
- Production engineers specifying well hardware
- Completion equipment application engineers
- Well integrity and petroleum engineers

Course outline

- 01 Completion objectives and basis of design
- 02 Tubing sizing and flow requirements
- 03 Completion architectures
- 04 Trees, hangers and safety valves
- 05 Packers, sleeves and flow control devices
- 06 Intelligent and multizone completions
- 07 Tubing movement and stress analysis
- 08 Materials and completion fluids
- 09 Installation and handover

Upcoming dates



Dates	Venue	Format	Fee per delegate
12 to 16 October 2026	Maputo, Mozambique	Classroom	USD 1,325
26 to 30 October 2026	Kampala, Uganda	Classroom	USD 1,325
25 to 29 January 2027	Pretoria, South Africa	Classroom	R19,950
1 to 5 February 2027	Dar es Salaam, Tanzania	Classroom	USD 1,325

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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