Datastat Research
Building Capacity in Training and Research

DATASTAT TRAINING IN

OFFICIAL COURSE PROSPECTUS

Center for Advanced Research & Professional Development

Nairobi Training Center • Global Virtual Academy • Corporate On-Site

OIL AND GAS

Advanced Well Stimulation Technologies Training Course

Comprehensive Course Syllabus, Practical Modules & Upcoming Schedules

PROGRAM SPECIFICATIONS & HIGHLIGHTS

DURATION
5 Days Practical Hands-on

DELIVERY MODES
In-Person Class & Live Virtual

CERTIFICATION
Accredited Certificate of Completion

INTAKES / DATES
Multiple Cohort Schedules Included

PREPARED FOR:

Valued Participant

Email: training@datastatresearch.org | Issued: November 22, 2026

Academic & Professional Training Year: 2026

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Advanced Well Stimulation Technologies Training Course

Oil and Gas • 5 Days Intensive • Accredited Certification

Course Overview

Advanced Well Stimulation Technologies Training Course provides an in-depth exploration of modern techniques used to restore, enhance, and sustain oil and gas well productivity in challenging reservoir environments.

Key Skills & Software Tools Covered

Well Stimulation • Hydraulic Fracturing • Acidizing Design • Production Optimization

Upcoming Training Schedules

Confirmed cohort intakes and venues. Both physical in-person classroom and live virtual online seats are available.

TRAINING DATES	LOCATION / VENUE	FORMAT / DURATION	INVESTMENT (FEE)
12 Oct 2026 – 16 Oct 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Cape Town	Classroom / 5d	**$4,500 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Addis Ababa	Classroom / 5d	**$3,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Singapore	Classroom / 5d	**$5,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Istanbul	Classroom / 5d	**$5,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Bangkok	Classroom / 5d	**$5,000 USD / KES 110,000**
12 Oct 2026 – 16 Oct 2026	Accra	Classroom / 5d	**$4,000 USD / KES 110,000**
19 Oct 2026 – 23 Oct 2026	Nairobi	Classroom / 5d	**$1,500 USD / KES 110,000**
19 Oct 2026 – 23 Oct 2026	Kigali	Classroom / 5d	**$3,000 USD / KES 110,000**
19 Oct 2026 – 23 Oct 2026	Dubai	Classroom / 5d	**$5,000 USD / KES 110,000**

* Corporate discounts and customized cohort scheduling are available for teams of 3 or more participants.

Course Curriculum & Modules

Advanced Well Stimulation Technologies Training Course

Introduction

Advanced Well Stimulation Technologies Training Course provides an in-depth exploration of modern techniques used to restore, enhance, and sustain oil and gas well productivity in challenging reservoir environments. The course focuses on advanced well stimulation, hydraulic fracturing, matrix acidizing, fracture acidizing, diversion technologies, stimulation fluid design, wellbore integrity, reservoir characterization, and production optimization. Participants will develop the technical capabilities required to evaluate formation damage, diagnose productivity constraints, select appropriate stimulation treatments, and design optimized intervention programs. Emphasis is placed on data-driven stimulation design, reservoir surveillance, digital oilfield technologies, real-time monitoring, and the application of emerging technologies to maximize well deliverability, recovery factor, and asset value.

The course also examines advanced stimulation strategies for conventional, unconventional, tight, carbonate, sandstone, mature, and complex reservoirs, enabling participants to make informed decisions under different geological and operational conditions. Through practical exercises and industry-based case studies, participants will evaluate treatment economics, stimulation risks, fluid compatibility, fracture geometry, placement efficiency, post-treatment performance, and environmental considerations. The program integrates production engineering, reservoir engineering, completion engineering, geomechanics, petrophysics, and well intervention, providing a multidisciplinary framework for achieving sustainable production gains while minimizing operational risks and well intervention costs.

Course Duration

5 days

Course Objectives

By the end of this course, participants will be able to:

- Apply advanced well stimulation technologies to improve productivity and reservoir performance.
- Diagnose formation damage and identify appropriate stimulation opportunities.
- Design and optimize matrix acidizing and fracture acidizing treatments.
- Evaluate advanced hydraulic fracturing designs for conventional and unconventional reservoirs.
- Select and optimize stimulation fluids, additives, proppants, and diversion systems.
- Apply reservoir characterization and geomechanical data to stimulation design.
- Optimize stimulation treatment placement using real-time monitoring and diagnostic technologies.
- Evaluate wellbore and completion integrity before, during, and after stimulation operations.
- Use production data and well-testing techniques to assess stimulation effectiveness.
- Apply digital oilfield, data analytics, and simulation technologies to stimulation optimization.
- Develop cost-effective well intervention and production enhancement strategies.
- Assess stimulation risks, HSE requirements, environmental impacts, and operational constraints.
- Develop integrated stimulation programs that maximize well productivity, recovery factor, and economic value.

Target Audience

- Petroleum and Reservoir Engineers
- Production and Completion Engineers
- Well Intervention and Stimulation Engineers
- Drilling Engineers and Well Integrity Specialists
- Geologists, Geophysicists, and Petrophysicists
- Production Technologists and Asset Engineers
- Field Supervisors and Well Services Professionals
- Oil & Gas Managers, Technical Leaders, and Decision-Makers

Course Modules

Module 1: Advanced Well Stimulation Fundamentals and Reservoir Diagnostics

- Principles and objectives of modern well stimulation.
- Identifying productivity impairment and formation damage.
- Reservoir and well performance diagnostics.
- Stimulation candidate selection and screening.
- Case Study: Diagnosing productivity decline and selecting an optimal stimulation strategy for a mature oil well.

Module 2: Advanced Matrix Acidizing Technologies

- Fundamentals of matrix acidizing in sandstone and carbonate reservoirs.
- Acid systems, additives, corrosion inhibitors, and compatibility.
- Treatment volume, injection rate, and placement optimization.
- Diversion techniques for heterogeneous formations.
- Case Study: Optimizing a carbonate matrix-acidizing treatment to restore declining production.

Module 3: Fracture Acidizing and Acid-Fracturing Optimization

- Principles of fracture acidizing and conductive fracture creation.
- Acid-rock interaction and wormhole development.
- Fracture geometry and acid placement considerations.
- Etched fracture conductivity and treatment optimization.
- Case Study: Designing a fracture-acidizing program for a naturally fractured carbonate reservoir.

Module 4: Advanced Hydraulic Fracturing Technologies

- Hydraulic fracture initiation, propagation, and containment.
- Slickwater, gel, hybrid, and energized fracturing systems.

- Proppant selection, transport, and placement.
- Fracture stimulation in tight and unconventional reservoirs.
- Case Study: Optimizing a multi-stage hydraulic fracturing treatment in a tight reservoir.

Module 5: Stimulation Fluids, Diversion and Placement Technologies

- Advanced stimulation fluid chemistry and formulation.
- Viscoelastic surfactants and high-performance stimulation fluids.
- Mechanical, chemical, and particulate diversion technologies.
- Fluid-loss control and treatment placement optimization.
- Case Study: Improving treatment distribution across a heterogeneous multi-zone reservoir.

Module 6: Geomechanics, Modeling and Digital Stimulation Design

- Application of geomechanics to fracture initiation and propagation.
- In-situ stress analysis and fracture containment.
- Reservoir and stimulation modeling workflows.
- Digital simulation, data analytics, and predictive stimulation optimization.
- Case Study: Using geomechanical modeling to optimize fracture height and treatment placement.

Module 7: Real-Time Monitoring, Evaluation and Production Optimization

- Pressure diagnostics and fracture treatment monitoring.
- Microseismic, production logging, and downhole diagnostic technologies.
- Post-stimulation well testing and performance evaluation.
- Production surveillance and stimulation success criteria.
- Case Study: Evaluating post-fracture production response and identifying optimization opportunities.

Module 8: Integrated Stimulation Strategy, Economics and Field Development

- Integrated stimulation planning across the well lifecycle.
- Treatment risk assessment and well integrity management.
- Stimulation economics, cost-benefit analysis, and value creation.
- HSE, environmental considerations, and operational risk management.
- Case Study: Developing an economically optimized stimulation campaign for a mature field with declining production.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@datastatresearch.org or call +254724527104

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you.

Certification & Learning Methodology

- Hands-on practical delivery with real-world datasets, case studies, and lab exercises.
- Post-training mentorship, access to class resources, and customized follow-up support.
- Participants who successfully complete the course receive an accredited Datastat Certificate of Completion.

How to Enroll & Reserve Your Seat

1. Online Registration: Visit https://datastatresearch.org/courses/advanced-well-stimulation-technologies-training-course to register online.
2. Email Booking: Send participant details to training@datastatresearch.org for official invoice & reservation.
3. Support & Assistance: Inquire via phone +254 724 527 104 | +254 734 969 612.