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

Acidizing Design and Optimization 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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Acidizing Design and Optimization Training Course

Oil and Gas • 5 Days Intensive • Accredited Certification

Course Overview

Acidizing Design and Optimization Training Course provides a comprehensive and practical understanding of modern well stimulation, matrix acidizing, acid fracturing, and production optimization techniques used to improve hydrocarbon recovery and well productivity.

Key Skills & Software Tools Covered

Acidizing Design • Stimulation Optimization • Reservoir Productivity Enhancement • Matrix Acidizing Techniques

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

Acidizing Design and Optimization Training Course

Introduction

Acidizing Design and Optimization Training Course provides a comprehensive and practical understanding of modern well stimulation, matrix acidizing, acid fracturing, and production optimization techniques used to improve hydrocarbon recovery and well productivity. The course explores the complete acidizing workflow, from reservoir and formation evaluation through treatment design, fluid selection, pumping strategies, diversion, placement, and post-treatment evaluation. Participants will develop the technical skills required to design safe, cost-effective, and reservoir-specific acid stimulation treatments while minimizing formation damage, corrosion risks, and treatment inefficiencies. Emphasis is placed on acid-rock interaction, carbonate and sandstone acidizing, reaction kinetics, wormhole development, skin reduction, injectivity improvement, and production enhancement.

The program integrates advanced acidizing technologies, digital reservoir analysis, treatment simulation, production diagnostics, real-time monitoring, and data-driven optimization to help professionals maximize stimulation outcomes. Participants will examine practical case studies involving treatment failures, successful production restoration, acid placement challenges, diversion strategies, and post-acidizing performance assessment. By combining theoretical principles with field-oriented applications, the course enables participants to make informed decisions regarding acid concentration, volume, injection rate, pressure, additives, diversion methods, and treatment economics. It is designed to strengthen capabilities in well stimulation engineering, reservoir management, production optimization, stimulation modeling, acid treatment troubleshooting, and oil and gas asset performance improvement.

Course Duration

5 days

Course Objectives

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

- Understand the fundamental principles of acidizing, well stimulation, and formation damage removal.
- Evaluate reservoir characteristics, mineralogy, permeability, porosity, and skin damage for acidizing applications.
- Differentiate between matrix acidizing, acid fracturing, and other stimulation technologies.
- Design optimized acid treatment programs for carbonate and sandstone reservoirs.
- Select appropriate acid systems, concentrations, additives, and treatment volumes.
- Apply acid-rock reaction kinetics and wormholing concepts to stimulation design.
- Optimize injection rates, treatment pressure, placement techniques, and pumping schedules.
- Apply advanced diversion technologies to improve acid distribution and treatment coverage.
- Evaluate acid compatibility, corrosion control, emulsification, and fluid-loss challenges.
- Use stimulation modeling and production data analytics to optimize treatment performance.
- Diagnose common acidizing failures, treatment inefficiencies, and post-stimulation production problems.
- Evaluate treatment success using well testing, production surveillance, pressure analysis, and post-job diagnostics.
- Develop cost-effective, safe, environmentally responsible, and high-performance acidizing strategies.

Target Audience

- Well Stimulation Engineers
- Production Engineers
- Reservoir Engineers
- Drilling and Completion Engineers
- Petroleum Engineers
- Well Intervention and Workover Professionals
- Field Operations and Stimulation Specialists
- Oil & Gas Asset Managers and Technical Supervisors

Course Modules

Module 1: Fundamentals of Acidizing and Well Stimulation

- Principles of well stimulation and formation damage removal
- Fundamentals of matrix acidizing and acid fracturing
- Sources and mechanisms of near-wellbore damage
- Acidizing applications in oil, gas, and injection wells
- Case Study: Restoring production from a damaged mature carbonate well

Module 2: Reservoir and Formation Evaluation for Acidizing

- Reservoir characterization and formation mineralogy
- Analysis of permeability, porosity, saturation, and skin
- Identifying candidate wells for acid stimulation
- Formation damage diagnosis and stimulation candidate selection
- Case Study: Selecting an optimal acidizing candidate using production and pressure data

Module 3: Acid Systems and Acid-Rock Chemistry

- Hydrochloric acid and alternative acid systems
- Organic acids and retarded acid technologies
- Acid-rock reaction mechanisms and reaction kinetics
- Acid additives, corrosion inhibitors, surfactants, and iron-control agents
- Case Study: Selecting an acid system for a high-temperature carbonate reservoir

Module 4: Matrix Acidizing Design

- Principles of matrix stimulation treatment design
- Acid volume, concentration, injection rate, and pressure calculations

- Designing preflush, main acid, and overflush stages
- Managing acid penetration and wormhole development
- Case Study: Optimizing matrix acidizing to reduce skin and increase well productivity

Module 5: Acid Fracturing and Advanced Stimulation

- Fundamentals of acid fracturing and fracture conductivity
- Fracture initiation, propagation, and acid etching
- Acid placement and penetration optimization
- High-rate acid treatments and treatment limitations
- Case Study: Improving productivity through optimized acid-fracture treatment design

Module 6: Diversion, Placement, and Treatment Optimization

- Selective acid placement and zonal coverage
- Mechanical and chemical diversion technologies
- Foam, gel, particulate, and viscoelastic diversion systems
- Managing heterogeneous reservoirs and thief zones
- Case Study: Improving treatment coverage in a multi-zone carbonate reservoir

Module 7: Acidizing Simulation, Diagnostics, and Performance Evaluation

- Acidizing models and stimulation treatment simulation
- Pressure and injection-rate analysis
- Real-time treatment monitoring and quality control
- Production response and post-treatment well testing
- Case Study: Using post-job diagnostics to identify an underperforming acid treatment

Module 8: Acidizing Optimization, Economics, Safety, and Field Applications

- Data-driven acidizing optimization and treatment redesign
- HSE risks, corrosion management, and operational controls
- Treatment economics and return-on-investment analysis
- Troubleshooting acidizing failures and improving treatment performance
- Case Study: Redesigning an unsuccessful stimulation campaign to improve production and economics

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/acidizing-design-and-optimization-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.