



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Identify Different Soil Types And Ground Conditions Training

Physical Planning and Construction / Civil Engineering Construction

Unit Standard 119524 · NQF Level 3 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to identify different soil types and ground conditions commonly encountered in South African construction and civil engineering contexts. Participants will learn to recognise soil characteristics, assess ground stability, and apply appropriate classification methods to ensure safe and effective work practices.

Category	Physical Planning and Construction
Subfield	Civil Engineering Construction
Unit Standard	119524
Accreditation	SAQA Accredited · NQF Level 3 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Identify common soil types and ground conditions using visual and tactile methods.
- Apply soil classification systems to categorise soils for construction purposes.
- Evaluate ground conditions to determine potential hazards and required safety measures.
- Demonstrate the ability to record and report soil and ground condition observations accurately.
- Analyse the impact of soil types and ground conditions on construction activities and equipment selection.
- Implement basic soil testing techniques to confirm field observations.

WHO SHOULD ATTEND

- This course is designed for construction workers, site supervisors, civil engineering technicians, and health and safety officers who need to identify soil types and ground conditions as part of their daily duties.

COURSE OUTLINE

Day 1: Introduction to Soil Types and Basic Identification

- Overview of soil formation and weathering processes.
- Classification of soil particles: gravel, sand, silt, clay.
- Field identification tests: ribbon test, ball test, sedimentation test.
- Soil colour and its indicators (drainage, organic matter).
- Influence of moisture on soil behaviour.
- Introduction to soil horizons and profiles.
- Practical exercise: soil sampling and basic identification.

Day 2: Soil Properties and Ground Conditions

- Physical properties: bulk density, void ratio, moisture content.
- Mechanical properties: shear strength, compressibility, plasticity.
- Soil compaction and its effect on stability.
- Groundwater and drainage assessment.
- In-situ testing methods and data recording.
- Common ground hazards: heave, settlement, erosion.
- Case studies of ground condition failures.
- Practical exercise: conducting and interpreting in-situ tests.

Day 3: Application of Soil Knowledge in Construction and Reporting

- Matching soil types to foundation types (strip, raft, pile).
- Soil bearing capacity calculations and allowable loads.
- Introduction to SANS 10160 and NHBRC guidelines.
- Soil improvement methods: compaction, drainage, chemical stabilisation.
- Erosion control and slope stability considerations.
- Writing a concise soil report: format, content, recommendations.
- Group exercise: site assessment simulation and report writing.
- Assessment and feedback.

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **6 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 17,900.00	R 17,900.00
1	In-House	R 23,300.00	R 23,300.00
1	On-Campus (Pretoria)	R 26,800.00	R 26,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	05 Aug 2026	On-Campus	Dubai, UAE
03 Aug 2026	05 Aug 2026	On-Campus	Johannesburg, South Africa
04 Aug 2026	06 Aug 2026	On-Campus	Pretoria, South Africa
04 Aug 2026	06 Aug 2026	On-Campus	Mauritius
05 Aug 2026	07 Aug 2026	On-Campus	Cape Town, South Africa
05 Aug 2026	07 Aug 2026	On-Campus	Lagos, Nigeria
10 Aug 2026	12 Aug 2026	On-Campus	Pretoria, South Africa
10 Aug 2026	12 Aug 2026	On-Campus	Mauritius

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 119524) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
2. **Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
3. **Apply by phone or WhatsApp:** call **+27 12 004 8389** or WhatsApp **+27 65 077 6310** and we will prepare your quotation and reserve your seats.
4. **Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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