



Accredited Africa Training Institute for Capacity Development

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

Tel: +27 12 004 8389 · Mobile: +27 65 077 6310

Email: apply@aatikd.co.za · Website: www.aatikd.co.za

COURSE BROCHURE

Explosive Obstacle Breaching Techniques

Law, Military Science and Security / Safety in Society

Unit Standard 257276 · NQF Level 5 · 9 Credits · 6 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to safely and effectively breach obstacles using explosives in a controlled environment. It covers the planning, preparation, and execution of explosive breaching operations, ensuring compliance with South African health, safety, and explosives regulations. Successful learners will be able to assess obstacles, select appropriate charges, and implement breaching procedures to achieve operational objectives.

Category	Law, Military Science and Security
Subfield	Safety in Society
Unit Standard	257276
Accreditation	SAQA Accredited · NQF Level 5 · 9 Credits
Duration	6 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply safety procedures and risk management principles when handling and using explosives for breaching operations.
- Analyze obstacle characteristics to determine the most effective breaching method and charge placement.
- Design a breaching plan that includes charge calculation, placement, and initiation sequence.
- Implement explosive breaching techniques to breach obstacles safely and efficiently.
- Evaluate the effectiveness of the breaching operation and conduct post-breach assessments.
- Demonstrate compliance with relevant South African legislation and industry standards for explosive use.

WHO SHOULD ATTEND

- This course is designed for security professionals, military personnel, and explosive ordnance disposal (EOD) operators who require competency in explosive breaching techniques.
- It is also suitable for individuals in specialized law enforcement or private security roles where obstacle breaching is a operational requirement.

COURSE OUTLINE

Day 1: Fundamentals of Explosive Breaching

- Introduction to explosive breaching: history and concepts
- Types of explosives: military, commercial, and improvised
- Initiation systems: detonators, fuses, and firing devices
- Safety procedures: handling, storage, and transport
- Legal and regulatory framework in South Africa
- Physics of explosions: overpressure, fragmentation, and shock waves
- Breaching charges: shape, size, and placement basics
- Risk assessment and mitigation strategies

Day 2: Explosive Materials and Handling

- Explosive compounds: RDX, PETN, TNT, ANFO, and dynamite
- Properties: sensitivity, brisance, velocity of detonation
- Safety in handling: personal protective equipment (PPE)
- Storage requirements: magazines, temperature, and humidity control
- Transportation regulations and procedures
- Charge calculation: formulas and practical examples
- Compatibility: mixing explosives and inert materials
- Inspection and disposal of deteriorated explosives

Day 3: Breaching Techniques and Charge Design

- Charge design principles: linear shaped charges, cutting charges
- Breaching wood: charge placement and sizing
- Breaching steel: thermal and explosive cutting
- Breaching concrete: cratering and demolition
- Standoff distance: calculation and effects
- Charge geometry: length, width, and angle
- Multiple charges: sequencing and simultaneity
- Post-blast analysis and assessment

Day 4: Initiation Systems and Firing Circuits

- Electrical initiation: blasting machines, wires, and continuity testing
- Non-electrical initiation: shock tube, detonating cord, and fuse
- Circuit design: series, parallel, and hybrid configurations
- Testing and troubleshooting: continuity, resistance, and shorts
- Safety interlocks and remote firing
- Timing devices: delays and synchronization
- Redundant systems and fail-safe measures
- Record keeping and documentation

Day 5: Practical Application and Simulation

- Scenario planning: target selection and charge design
- Risk assessment: site survey and hazard identification
- Safety briefing: roles, responsibilities, and emergency procedures
- Charge preparation: cutting, placing, and priming
- Firing circuit assembly and testing

- Initiation and observation
- Post-blast inspection and reporting
- Lessons learned and corrective actions

Day 6: Integration, Assessment, and Certification

- Comprehensive exercise: multiple target breaching
- Team coordination and communication
- Assessment: written exam on theory and safety
- Practical assessment: charge design, assembly, and initiation
- Debrief and feedback
- Maintenance of equipment and explosives
- Record keeping: logs, reports, and inventory
- Certification and continuing education

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 **9 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 26,900.00	R 26,900.00
1	In-House	R 35,000.00	R 35,000.00
1	On-Campus (Pretoria)	R 40,300.00	R 40,300.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	17 Aug 2026	On-Campus	Abu Dhabi, UAE
11 Aug 2026	18 Aug 2026	On-Campus	Durban, South Africa
11 Aug 2026	18 Aug 2026	On-Campus	Mauritius
12 Aug 2026	19 Aug 2026	On-Campus	Cape Town, South Africa
13 Aug 2026	20 Aug 2026	On-Campus	Dubai, UAE
14 Aug 2026	21 Aug 2026	On-Campus	Pretoria, South Africa
17 Aug 2026	24 Aug 2026	On-Campus	Durban, South Africa
18 Aug 2026	25 Aug 2026	On-Campus	Shenzhen, China

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 257276) 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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