



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

Forensic Biology Fundamentals

Law, Military Science and Security / Safety in Society

Unit Standard 242713 · NQF Level 5 · 6 Credits · 3 Days

COURSE OVERVIEW

This course provides a foundational understanding of forensic biology, covering its role in criminal investigations, evidence collection and preservation, and the application of biological principles to legal contexts. Participants will gain insight into the scientific methods used to analyze biological evidence and the ethical considerations involved in forensic practice.

Category	Law, Military Science and Security
Subfield	Safety in Society
Unit Standard	242713
Accreditation	SAQA Accredited · NQF Level 5 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate an understanding of the scope and principles of forensic biology.
- Apply appropriate methods for the collection, preservation, and documentation of biological evidence.
- Analyze biological evidence using standard forensic techniques.
- Evaluate the legal and ethical implications of forensic biological evidence.
- Interpret DNA profiling results and other biological analyses in a forensic context.

WHO SHOULD ATTEND

- This course is designed for forensic science students, law enforcement officers, crime scene investigators, and legal professionals seeking to understand the biological aspects of forensic evidence.

COURSE OUTLINE

Day 1: Introduction to Forensic Biology and Evidence Types

- Overview of forensic biology and its applications
- Types of biological evidence and their sources
- Principles of evidence collection, packaging, and preservation
- Chain of custody and documentation
- Introduction to DNA structure and function
- Genetic markers used in forensic analysis
- Legal and ethical considerations in forensic biology

Day 2: DNA Analysis Techniques and Interpretation

- DNA extraction methods (organic, Chelex, magnetic beads)
- DNA quantification techniques (qPCR, spectrophotometry)
- Polymerase chain reaction (PCR) and multiplex STR kits
- Capillary electrophoresis and allele calling
- Interpretation of single-source and mixed DNA profiles
- Statistical analysis: random match probability and likelihood ratios
- Quality assurance and control in DNA analysis
- Troubleshooting common issues

Day 3: Advanced Applications and Casework Integration

- Mitochondrial DNA (mtDNA) analysis and applications
- Y-STR analysis for male-specific DNA
- RNA analysis for body fluid identification
- Handling challenging samples (touch DNA, degraded, inhibited)
- Contamination prevention and control measures
- Case studies: sexual assault, homicide, paternity
- Report writing and expert witness testimony
- Emerging technologies and future trends

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 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 18,800.00	R 18,800.00
1	In-House	R 24,500.00	R 24,500.00
1	On-Campus (Pretoria)	R 28,100.00	R 28,100.00

UPCOMING SESSIONS

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

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 242713) 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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