



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

Wild Animal Population Monitoring Techniques

Agriculture and Nature Conservation / Nature Conservation

Unit Standard 253957 · NQF Level 5 · 15 Credits · 12 Days

COURSE OVERVIEW

This course equips learners with the skills and knowledge to effectively monitor wild animal populations in various South African contexts, including game reserves and conservation areas. It covers techniques for population estimation, data collection, and interpretation to support sound wildlife management decisions. The course emphasizes ethical practices and safety protocols essential for field-based monitoring.

Category	Agriculture and Nature Conservation
Subfield	Nature Conservation
Unit Standard	253957
Accreditation	SAQA Accredited · NQF Level 5 · 15 Credits
Duration	12 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply appropriate methods for estimating wild animal population size and structure.
- Demonstrate safe and ethical field techniques for observing and recording animal data.
- Analyze population data to assess trends and identify potential threats.
- Evaluate the effectiveness of different monitoring techniques for specific species and habitats.
- Implement data recording and reporting procedures in line with organisational standards.
- Design a basic population monitoring plan for a given conservation area.

WHO SHOULD ATTEND

- This course is designed for field rangers, conservation officers, wildlife managers, and environmental practitioners involved in the monitoring and management of wild animal populations.
- It is also suitable for students and graduates seeking practical skills in wildlife conservation.

COURSE OUTLINE

Day 1: Introduction to Wildlife Population Monitoring

- Role of monitoring in wildlife management
- Population parameters: abundance, density, distribution
- Sampling methods overview
- Ethical handling and animal welfare
- Introduction to monitoring plan development

Day 2: Sampling Design and Statistical Foundations

- Descriptive and inferential statistics
- Probability sampling methods
- Sample size determination
- Bias, precision, and accuracy
- Power analysis for monitoring

Day 3: Distance Sampling Techniques

- Line transect vs. point transect methods
- Detection function and assumptions
- Field protocols for distance sampling
- Data recording and management
- Introduction to Distance software

Day 4: Mark-Recapture Methods

- Capture-mark-recapture (CMR) principles
- Closed population models
- Open population models
- Marking techniques and recapture strategies
- Data analysis with MARK or R

Day 5: Camera Trapping and Remote Sensing

- Camera trap deployment and protocols
- Occupancy modeling basics
- Image processing and identification
- Remote sensing data sources (satellite, drones)
- Integrating remote sensing with ground surveys

Day 6: Acoustic Monitoring and Indirect Signs

- Acoustic monitoring equipment
- Call playback and autonomous recording units
- Acoustic analysis software
- Sign surveys: transects and plotless methods
- Conversion factors from signs to density

Day 7: Aerial Surveys and UAV Applications

- Fixed-wing and helicopter surveys
- UAV regulations and flight planning
- Image georeferencing and stitching
- Double-count and sightability models

- Thermal imaging applications

Day 8: Population Viability Analysis and Modeling

- Leslie matrix models
- Stochasticity and uncertainty
- Vortex and RAMAS software
- Sensitivity analysis
- Scenario planning for conservation

Day 9: Genetic and Non-Invasive Sampling

- Non-invasive sampling techniques
- DNA extraction and microsatellite analysis
- Genotyping errors and quality control
- Genetic mark-recapture models
- Ethical and legal considerations

Day 10: Data Management and Quality Assurance

- Database design (Access, SQL)
- Data entry protocols
- Error checking and outlier detection
- Metadata and data sharing
- GIS integration for spatial analysis

Day 11: Integrated Monitoring Programs and Reporting

- Adaptive management frameworks
- Multi-method integration
- Report writing and data visualization
- Communication with non-scientists
- Case studies of successful programs

Day 12: Final Project and Course Review

- Group project: monitoring plan development
- Peer review and feedback
- Course synthesis and Q&A;
- Certification requirements
- Resources for continued learning

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 **15 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 43,000.00	R 43,000.00
1	In-House	R 56,000.00	R 56,000.00
1	On-Campus (Pretoria)	R 64,600.00	R 64,600.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	25 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	25 Aug 2026	On-Campus	Mauritius
11 Aug 2026	26 Aug 2026	On-Campus	Cape Town, South Africa
12 Aug 2026	27 Aug 2026	On-Campus	Dubai, UAE
13 Aug 2026	28 Aug 2026	On-Campus	Pretoria, South Africa
14 Aug 2026	31 Aug 2026	On-Campus	Abu Dhabi, UAE
17 Aug 2026	01 Sep 2026	On-Campus	Shenzhen, China
18 Aug 2026	02 Sep 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 253957) 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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