



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

Net Adjustment And Positioning Techniques Training

Services / Transport, Operations and Logistics

Unit Standard 113990 · NQF Level 3 · 4 Credits · 1 Day

COURSE OVERVIEW

This course equips learners with the skills to apply net adjustment and positioning techniques in surveying and geospatial data processing. Participants will learn to analyze survey measurements, apply least squares adjustments, and evaluate positioning accuracy to produce reliable spatial data.

Category	Services
Subfield	Transport, Operations and Logistics
Unit Standard	113990
Accreditation	SAQA Accredited · NQF Level 3 · 4 Credits
Duration	1 day
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply least squares adjustment methods to survey observations to determine most probable values.
- Analyze and evaluate the quality of survey measurements using statistical error analysis.
- Design adjustment models for GNSS and terrestrial survey networks.
- Implement network adjustment procedures using appropriate software tools.
- Demonstrate competency in interpreting adjustment results and assessing positioning accuracy.

WHO SHOULD ATTEND

- This course is designed for surveyors, geomatics professionals, and technicians who need to enhance their knowledge of adjustment computations and positioning techniques.

COURSE OUTLINE

Day 1: Fundamentals of Net Adjustment and Positioning

- Introduction to network adjustment and positioning techniques
- Least squares adjustment theory and mathematical models
- Types of adjustments: free, constrained, and weighted
- Error sources, stochastic models, and variance estimation
- Statistical testing: residuals, chi-square test, and blunder detection
- Network design considerations: redundancy, strength of figure
- Introduction to software tools for network adjustment
- Case studies of typical survey networks (e.g., control, cadastral)

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 **4 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 12,800.00	R 12,800.00
1	In-House	R 16,600.00	R 16,600.00
1	On-Campus (Pretoria)	R 19,200.00	R 19,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
06 Aug 2026	06 Aug 2026	On-Campus	Johannesburg, South Africa
07 Aug 2026	07 Aug 2026	On-Campus	Mauritius
10 Aug 2026	10 Aug 2026	On-Campus	Dubai, UAE
11 Aug 2026	11 Aug 2026	On-Campus	Pretoria, South Africa
12 Aug 2026	12 Aug 2026	On-Campus	Abu Dhabi, UAE
13 Aug 2026	13 Aug 2026	On-Campus	Durban, South Africa
13 Aug 2026	13 Aug 2026	On-Campus	Mauritius
14 Aug 2026	14 Aug 2026	On-Campus	Cape Town, South Africa

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 113990) 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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