



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

Immunochemistry Specimen Handling in Medical Labs

Health Sciences and Social Services / Curative Health

Unit Standard 257216 · NQF Level 3 · 8 Credits · 5 Days

COURSE OVERVIEW

This course equips laboratory professionals with the skills to safely and accurately handle biological specimens for immunochemistry analysis. Participants will learn proper collection, transport, storage, and processing techniques to ensure test integrity and compliance with South African health and safety regulations.

Category	Health Sciences and Social Services
Subfield	Curative Health
Unit Standard	257216
Accreditation	SAQA Accredited · NQF Level 3 · 8 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply standard operating procedures for the collection, transport, and storage of biological specimens for immunochemistry.
- Demonstrate correct labelling, documentation, and chain-of-custody procedures to ensure specimen traceability.
- Analyze potential pre-analytical errors and implement corrective actions to maintain specimen integrity.
- Evaluate biosafety risks and apply appropriate personal protective equipment and containment measures.
- Implement quality control checks for specimen acceptability and rejection criteria.
- Demonstrate proper disposal of biological waste according to South African environmental and health regulations.

WHO SHOULD ATTEND

- This course is designed for medical laboratory technicians, technologists, and scientists who handle biological specimens for immunochemistry testing in clinical or research laboratories.

COURSE OUTLINE

Day 1: Fundamentals of Immunochemistry and Specimen Integrity

- Overview of immunochemistry: antigens, antibodies, and immune reactions.
- Common immunochemistry assays: ELISA, chemiluminescence, immunofluorescence.
- Pre-analytical phase: patient preparation, timing, and specimen types (serum, plasma, CSF).
- Specimen collection devices: tubes, additives, and order of draw.
- Factors affecting specimen stability: temperature, time, light, and haemolysis.
- Chain of custody and labelling requirements.
- Introduction to quality control in specimen handling.

Day 2: Processing, Storage, and Transport of Immunochemistry Specimens

- Centrifugation protocols: speed, time, and temperature for serum/plasma separation.
- Aliquoting techniques to avoid contamination and freeze-thaw cycles.
- Storage conditions: short-term (refrigeration) and long-term (freezing) guidelines.
- Transport logistics: cold chain, packaging, and shipping regulations.
- Safety in the lab: PPE, biohazard disposal, and spill management.
- Documentation: logs for storage and transport temperatures.
- Case studies: common errors in processing and storage.

Day 3: Quality Assurance and Troubleshooting in Specimen Handling

- Quality indicators: rejection criteria for haemolysed, lipaemic, or clotted specimens.
- Troubleshooting: causes and solutions for insufficient volume, wrong tube, and mislabelling.
- Internal quality control: use of controls and calibrators in specimen handling.
- External quality assessment: proficiency testing schemes.
- Root cause analysis of pre-analytical errors.
- Documentation and standard operating procedures (SOPs).
- Audit trails and continuous improvement.

Day 4: Special Considerations and Advanced Techniques

- Handling of light-sensitive and unstable analytes (e.g., vitamins, catecholamines).
- Specimen requirements for autoimmune and allergy testing.
- Infectious disease serology: handling of high-risk specimens (HIV, hepatitis).
- Interference: effect of drugs, haemolysis, and heterophilic antibodies.
- Automation in specimen processing: barcoding, robotic aliquoting.
- Point-of-care immunochemistry: specimen handling considerations.
- Regulatory compliance: SANAS and SAQA standards.

Day 5: Practical Integration and Assessment

- Case studies: complex specimen handling scenarios.
- Review of day 1-4 content with Q&A.
- Mock audits and error identification exercises.
- Final assessment: written test and practical demonstration.
- Career pathways and continuing education.
- Course wrap-up 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 **8 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 16,900.00	R 16,900.00
1	In-House	R 22,000.00	R 22,000.00
1	On-Campus (Pretoria)	R 25,400.00	R 25,400.00

UPCOMING SESSIONS

Start	End	Method	Venue
24 Aug 2026	28 Aug 2026	On-Campus	Victoria Falls, Zimbabwe
24 Aug 2026	28 Aug 2026	On-Campus	Bangkok, Thailand
24 Aug 2026	28 Aug 2026	On-Campus	Harare, Zimbabwe
24 Aug 2026	28 Aug 2026	On-Campus	Shenzhen, China
24 Aug 2026	28 Aug 2026	On-Campus	Durban, South Africa
24 Aug 2026	28 Aug 2026	On-Campus	Abu Dhabi, UAE
31 Aug 2026	04 Sep 2026	On-Campus	Shenzhen, China
31 Aug 2026	04 Sep 2026	On-Campus	Harare, Zimbabwe

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 257216) 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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