



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@aaticd.co.za · Website: www.aaticd.co.za

COURSE BROCHURE

Organic Solvent Recovery From Aqueous Metal Solutions Via Distillation Training

Manufacturing, Engineering and Technology / Fabrication and Extraction

Unit Standard 110185 · NQF Level 2 · 3 Credits · 1 Day

COURSE OVERVIEW

This course equips learners with the knowledge and skills to safely and efficiently recover organic solvents from aqueous metal solutions using distillation techniques. It covers the principles of distillation, equipment operation, and safety protocols specific to handling volatile solvents and metal solutions. Upon completion, learners will be able to apply distillation processes in industrial settings to recover solvents, reduce waste, and comply with environmental regulations.

Category	Manufacturing, Engineering and Technology
Subfield	Fabrication and Extraction
Unit Standard	110185
Accreditation	SAQA Accredited · NQF Level 2 · 3 Credits
Duration	1 day
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply distillation principles to separate organic solvents from aqueous metal solutions.
- Analyze the composition of feed mixtures to determine optimal distillation parameters.
- Implement safety procedures for handling flammable solvents and hazardous metal solutions.
- Evaluate distillation column performance and troubleshoot common operational issues.
- Design a simple batch or continuous distillation setup for solvent recovery.
- Demonstrate proper waste management and environmental compliance in solvent recovery processes.

WHO SHOULD ATTEND

- This course is designed for process operators, laboratory technicians, and chemical engineers working in mining, metallurgy, or chemical processing industries who are involved in solvent extraction and recovery operations.

COURSE OUTLINE

Day 1: Principles and Practice of Organic Solvent Recovery from Aqueous Metal Solutions

- Introduction to solvent recovery in hydrometallurgy: importance and applications.
- Phase equilibria: vapour-liquid equilibrium for solvent-water systems.
- Distillation equipment: columns, reboilers, condensers, and decanters.
- Process parameters: temperature, pressure, reflux ratio, and feed composition.
- Quality control: sampling, analysis (GC, Karl Fischer), and purity specifications.
- Safety: flammability, toxicity, and handling of organic solvents.
- Environmental compliance: waste minimisation and solvent recycling.
- Troubleshooting common issues: foaming, flooding, and solvent losses.

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 **3 NQF credits** at **NQF Level 2**.

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
03 Aug 2026	03 Aug 2026	On-Campus	Mauritius
04 Aug 2026	04 Aug 2026	On-Campus	Cape Town, South Africa
05 Aug 2026	05 Aug 2026	On-Campus	Dubai, UAE
06 Aug 2026	06 Aug 2026	On-Campus	Pretoria, South Africa
06 Aug 2026	06 Aug 2026	On-Campus	Lagos, Nigeria
07 Aug 2026	07 Aug 2026	On-Campus	Johannesburg, South Africa
10 Aug 2026	10 Aug 2026	On-Campus	Cape Town, South Africa
11 Aug 2026	11 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 110185) 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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