



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

Spiral Fabrication Using Triangulation Methods Training

Manufacturing, Engineering and Technology / Fabrication and Extraction

Unit Standard 115744 · NQF Level 3 · 5 Credits · 2 Days

COURSE OVERVIEW

This course equips learners with the skills to fabricate spiral components using triangulation methods. It focuses on accurate measurement, layout, and construction techniques essential for custom fabrication in engineering and manufacturing contexts. Learners will apply geometric principles to produce precise spiral forms for various industrial applications.

Category	Manufacturing, Engineering and Technology
Subfield	Fabrication and Extraction
Unit Standard	115744
Accreditation	SAQA Accredited · NQF Level 3 · 5 Credits
Duration	2 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate the ability to interpret technical drawings and specifications for spiral fabrication.
- Apply triangulation methods to develop accurate patterns for spiral components.
- Calculate dimensions and angles required for spiral fabrication using geometric principles.
- Fabricate spiral components using appropriate tools and techniques in a workshop environment.
- Inspect and verify fabricated spirals against specified tolerances and quality standards.
- Implement safety procedures and best practices during the fabrication process.

WHO SHOULD ATTEND

- This course is designed for artisans, technicians, and engineers involved in metal fabrication, sheet metal work, or boiler-making who need to produce spiral shapes using manual triangulation methods.

COURSE OUTLINE

Day 1: Foundations of Spiral Fabrication and Triangulation

- Introduction to spiral fabrication and its industrial applications.
- Geometric principles: triangles, angles, and spiral geometry.
- Triangulation methods for layout and measurement.
- Tools and equipment: tape measures, protractors, marking tools.
- Safety procedures and personal protective equipment (PPE).
- Practical exercise: laying out a simple spiral using triangulation.
- Calculation techniques for spiral pitch and radius.
- Quality control: checking alignment and dimensions.

Day 2: Advanced Techniques and Practical Integration

- Advanced triangulation: compound angles and multiple segments.
- Material selection and preparation for spiral fabrication.
- Cutting, bending, and forming spiral components.
- Assembly and welding techniques for spiral structures.
- Practical project: fabricating a complete spiral assembly.
- Inspection methods: measuring pitch, diameter, and alignment.
- Troubleshooting common fabrication errors.
- Documentation and reporting of fabrication processes.

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 **5 NQF credits** at **NQF Level 3**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 15,400.00	R 15,400.00
1	In-House	R 20,000.00	R 20,000.00
1	On-Campus (Pretoria)	R 23,100.00	R 23,100.00

UPCOMING SESSIONS

Start	End	Method	Venue
05 Aug 2026	06 Aug 2026	On-Campus	Dubai, UAE
05 Aug 2026	06 Aug 2026	On-Campus	Mauritius
05 Aug 2026	06 Aug 2026	On-Campus	Lagos, Nigeria
11 Aug 2026	12 Aug 2026	On-Campus	Durban, South Africa
11 Aug 2026	12 Aug 2026	On-Campus	Pretoria, South Africa
11 Aug 2026	12 Aug 2026	On-Campus	Cape Town, South Africa
13 Aug 2026	14 Aug 2026	On-Campus	Mauritius
13 Aug 2026	14 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 115744) 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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