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

Production Optimization

Custom Courses / Energy, Oil and Gas

Unit Standard AATICD-0397 · NQF Level 5 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips production supervisors, team leaders, and operations managers with the skills to optimise manufacturing and service delivery processes. Participants will learn to identify inefficiencies, implement improvement strategies, and drive sustainable productivity gains.

Category	Custom Courses
Subfield	Energy, Oil and Gas
Unit Standard	AATICD-0397
Accreditation	SAQA Accredited · NQF Level 5 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS — verifiable online

LEARNING OUTCOMES

- Apply lean principles to identify and eliminate waste in production processes.
- Analyze production data to pinpoint bottlenecks and performance gaps.
- Evaluate alternative optimisation strategies using cost-benefit and risk analysis.
- Design a production optimisation plan that integrates quality, safety, and efficiency.
- Implement continuous improvement initiatives using PDCA or DMAIC methodologies.
- Demonstrate leadership in driving a culture of operational excellence.

WHO SHOULD ATTEND

- Production supervisors, team leaders, operations managers, and process improvement practitioners in manufacturing or service industries.

COURSE OUTLINE

Day 1: **Fundamentals of Production Optimization**

- Introduction to production optimization
- Key performance indicators (KPIs) and metrics
- Lean manufacturing principles (5S, value stream mapping
- Types of waste (muda, mura, muri
- Bottlenecks and the Theory of Constraints
- Data collection and analysis basics
- Introduction to process mapping
- Case studies of successful optimization

Day 2: **Tools and Techniques for Optimization**

- Statistical process control (SPC) and control charts
- Root cause analysis (5 Whys, fishbone diagram
- Continuous improvement: Kaizen and PDCA cycles
- Process simulation and modeling (e.g., discrete event simulation
- Production scheduling (JIT, Kanban, MRP
- Capacity planning and resource allocation
- Total Productive Maintenance (TPM) overview
- Hands-on exercises with data analysis tools

Day 3: **Advanced Strategies and Integration**

- Advanced optimization strategies (overall equipment effectiveness, throughput
- Industry 4.0: IoT, AI, and machine learning in production
- Automation and robotics for process improvement
- Change management and leadership for optimization
- Financial analysis and cost-benefit of optimization
- Sustainability and energy efficiency in production
- Developing an optimization action plan
- Final project: presenting an optimization proposal

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 **6 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 13,900.00	**R 13,900.00**
1	In-House	R 18,700.00	**R 18,700.00**
1	On-Campus (Pretoria)	R 20,800.00	**R 20,800.00**

UPCOMING SESSIONS

Start	End	Method	Venue
01 Dec 2026	03 Dec 2026	On-Campus	Victoria Falls, Zimbabwe
01 Dec 2026	03 Dec 2026	On-Campus	Dubai, UAE
02 Dec 2026	04 Dec 2026	On-Campus	Shenzhen, China
02 Dec 2026	04 Dec 2026	On-Campus	Cape Town, South Africa
08 Dec 2026	10 Dec 2026	On-Campus	Maseru, Lesotho
08 Dec 2026	10 Dec 2026	On-Campus	Kigali, Rwanda
08 Dec 2026	10 Dec 2026	On-Campus	Accra, Ghana
08 Dec 2026	10 Dec 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 QUOTATION OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard AATICD-0397) and click **Get A Quotation**. 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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