



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

ASQ Introduction to Quality Engineering

Custom Courses / Engineering and Instrumentation

Unit Standard AATICD-0031 · NQF Level 5 · 10 Credits · 5 Days

COURSE OVERVIEW

This comprehensive course provides participants with a foundational understanding of quality engineering principles and practices. It covers the core concepts of quality management systems, process improvement methodologies, and statistical tools essential for ensuring product and service excellence. Participants will learn to apply quality engineering techniques to enhance organizational performance and customer satisfaction.

Category	Custom Courses
Subfield	Engineering and Instrumentation
Unit Standard	AATICD-0031
Accreditation	SAQA Accredited · NQF Level 5 · 10 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply fundamental quality engineering concepts and principles to real-world scenarios.
- Analyze process data using basic statistical methods to identify variations and improvement opportunities.
- Evaluate quality management systems against established standards such as ISO 9001.
- Design process control plans and inspection strategies to ensure product conformance.
- Implement corrective and preventive actions using root cause analysis techniques.
- Demonstrate proficiency in using quality tools such as Pareto charts, cause-and-effect diagrams, and control charts.

WHO SHOULD ATTEND

- This course is designed for professionals seeking to enter the quality engineering field, including quality technicians, process engineers, production supervisors, and recent graduates.
- It is also suitable for managers and team leaders who need to integrate quality principles into their daily operations.

COURSE OUTLINE

Day 1: Foundations of Quality Engineering

- Introduction to quality engineering and its evolution
- Quality philosophies (Deming, Juran, Crosby)
- Quality management system standards (ISO 9000 series)
- Customer focus and stakeholder identification
- Cost of quality (COQ) categories
- Quality policy and objectives
- Introduction to process approach
- Overview of quality tools and techniques

Day 2: Quality Planning and Control

- Quality planning process
- Process mapping and flowcharts
- Control charts (variables and attributes)
- Process capability analysis (Cp, Cpk)
- Sampling plans and acceptance sampling
- Corrective and preventive action (CAPA)
- Control of nonconforming product
- Documentation and record keeping

Day 3: Quality Assurance and Auditing

- Quality assurance principles
- Audit types (internal, external, supplier)
- Audit planning, checklists, and execution
- Nonconformity identification and reporting
- Supplier selection and evaluation
- Supplier quality agreements
- Measurement system analysis (MSA)
- Calibration and traceability

Day 4: Continuous Improvement and Problem Solving

- PDCA cycle and DMAIC methodology
- Lean principles (waste reduction, value stream mapping)
- Root cause analysis (5 Whys, Fishbone diagram)
- Failure mode and effects analysis (FMEA)
- Design of experiments (DOE) basics
- Kaizen and continuous improvement culture
- Statistical process control (SPC) review
- Performance metrics and dashboards

Day 5: Quality Engineering Integration and Certification Preparation

- Quality function deployment (QFD)
- Reliability engineering basics
- Risk management in quality
- Quality in design and development
- Software quality assurance

- ASQ CQE exam overview and study tips
- Capstone case study: applying quality engineering
- Course wrap-up and action planning

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 **10 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 24,200.00	R 24,200.00
1	In-House	R 31,400.00	R 31,400.00
1	On-Campus (Pretoria)	R 36,200.00	R 36,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
03 Aug 2026	07 Aug 2026	On-Campus	Dubai, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
17 Aug 2026	21 Aug 2026	On-Campus	Harare, Zimbabwe
17 Aug 2026	21 Aug 2026	On-Campus	Shenzhen, China
24 Aug 2026	28 Aug 2026	On-Campus	Bangkok, Thailand
24 Aug 2026	28 Aug 2026	On-Campus	Victoria Falls, 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 AATICD-0031) 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.

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 · WhatsApp: +27 65 077 6310 · apply@aaticd.co.za · www.aaticd.co.za