



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

COURSE BROCHURE

Machine Safety

Custom Courses / Health, Safety and Environment (HSE)

Unit Standard AATICD-0321 · NQF Level 5 · 10 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the fundamental knowledge and practical skills to identify, assess, and control machinery-related hazards in the workplace. It focuses on promoting a safety culture, understanding legal requirements, and implementing safe working procedures to prevent injuries and fatalities.

Category	Custom Courses
Subfield	Health, Safety and Environment (HSE)
Unit Standard	AATICD-0321
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 the principles of machine safety to identify common hazards associated with machinery operation.
- Analyze risk assessment methods to evaluate the severity and likelihood of machinery-related incidents.
- Implement appropriate safeguarding measures, including guards, interlocks, and safety devices, to control identified risks.
- Demonstrate correct lockout/tagout procedures for the safe isolation of machinery during maintenance and repair.
- Evaluate the effectiveness of machine safety programs and recommend improvements based on regulatory compliance and best practices.
- Design a basic machine safety checklist for routine inspections and audits in the workplace.

WHO SHOULD ATTEND

- This course is designed for machine operators, maintenance personnel, safety officers, and supervisors who work with or around machinery in industrial, manufacturing, or processing environments.

COURSE OUTLINE

Day 1: Introduction to Machine Safety and Legal Framework

- Overview of machine safety and its significance
- Occupational Health and Safety Act (OHSA) and Mine Health and Safety Act (MHSA)
- SANS 10227 and other relevant standards
- Duties of manufacturers, suppliers, employers, and employees
- Hazard identification and risk assessment principles
- Types of machine hazards: mechanical, electrical, thermal, etc.
- Machine safety in the context of the hierarchy of controls
- Case studies of machine-related incidents

Day 2: Risk Assessment and Hazard Analysis

- Introduction to risk assessment (ISO 12100)
- Steps in risk assessment: hazard identification, risk estimation, risk evaluation
- Risk assessment tools: checklists, FMEA, fault tree analysis
- Practical exercise: risk assessment on a sample machine
- Hierarchy of controls: elimination, substitution, engineering controls, administrative controls, PPE
- Residual risk and its acceptance
- Documentation of risk assessments
- Review and update of risk assessments

Day 3: Machine Guarding and Safety Devices

- Fixed guards: design, application, and advantages
- Adjustable guards and self-adjusting guards
- Interlocked guards: types and operation
- Safety devices: presence-sensing systems (light curtains, laser scanners), safety mats, two-hand controls
- Requirements for guard construction and installation (ISO 14120)
- Maintenance and inspection of guards
- Practical demonstration of guards and devices
- Case studies on guard effectiveness

Day 4: Safe Work Procedures and Operator Training

- Safe work procedures: development, content, and implementation
- Lockout/tagout (LOTO): principles, procedures, and compliance
- Operator training: content, methods, and documentation
- Emergency procedures: stopping, e-stop, and evacuation
- Machine safety inspections: checklists and frequency
- Safety audits: internal and external
- Behaviour-based safety and human factors
- Communication and signage for machine safety

Day 5: Integration, Continuous Improvement, and Assessment

- Integration with safety management systems (ISO 45001)
- Continuous improvement: monitoring, measuring, and analysing
- Incident investigation and root cause analysis
- Review of case studies and best practices
- Developing a machine safety action plan

- Final assessment: written test and practical demonstration
- Course review and feedback
- Certification requirements and future learning paths

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 17,700.00	R 17,700.00
1	In-House	R 23,100.00	R 23,100.00
1	On-Campus (Pretoria)	R 26,700.00	R 26,700.00

UPCOMING SESSIONS

Start	End	Method	Venue
05 Oct 2026	09 Oct 2026	On-Campus	Kigali, Rwanda
05 Oct 2026	09 Oct 2026	On-Campus	Bangkok, Thailand
05 Oct 2026	09 Oct 2026	On-Campus	Lusaka, Zambia
05 Oct 2026	09 Oct 2026	Online	—
05 Oct 2026	09 Oct 2026	On-Campus	Windhoek, Namibia
05 Oct 2026	09 Oct 2026	On-Campus	Nairobi, Kenya
05 Oct 2026	09 Oct 2026	On-Campus	Mbabane, Eswatini
12 Oct 2026	16 Oct 2026	On-Campus	London, UK

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-0321) 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