



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

Truck Mounted Loader Crane Operation Skills Training

Physical Planning and Construction / Civil Engineering Construction

Unit Standard 116253 · NQF Level 2 · 20 Credits · 17 Days

COURSE OVERVIEW

This course equips learners with the skills and knowledge required to safely and efficiently operate a truck mounted loader crane in accordance with South African regulations and industry best practices. Participants will gain practical competence in pre-operational inspections, load handling, and emergency procedures to minimize workplace risks and ensure compliance with OHS Act requirements.

Category	Physical Planning and Construction
Subfield	Civil Engineering Construction
Unit Standard	116253
Accreditation	SAQA Accredited · NQF Level 2 · 20 Credits
Duration	17 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Demonstrate the ability to perform pre-operational inspections and identify defects in a truck mounted loader crane according to manufacturer specifications and legal requirements.
- Apply safe operating procedures for lifting, moving, and placing loads using a truck mounted loader crane, including load chart interpretation and stability assessment.
- Analyze site conditions and load characteristics to determine appropriate rigging and lifting techniques, ensuring load security and personnel safety.
- Implement emergency shutdown and incident response procedures in the event of equipment malfunction or hazardous situations.
- Evaluate the impact of environmental factors (e.g., wind, ground conditions) on crane stability and adjust operations accordingly.
- Demonstrate compliance with relevant South African legislation, including the OHS Act and SANS standards, during all crane operations.

WHO SHOULD ATTEND

- This course is designed for operators, supervisors, and safety personnel involved in the operation or management of truck mounted loader cranes in industries such as logistics, construction, mining, and manufacturing.

COURSE OUTLINE

Day 1: Introduction to Truck Mounted Loader Cranes and Safety

- Overview of truck mounted loader crane types and uses
- Main components: boom, hydraulic system, controls, stabilisers
- Introduction to OHS Act, SANS 10160, and manufacturer specifications
- Personal protective equipment (PPE) requirements
- Basic safety principles and hazard awareness
- Pre-operational inspection checklist

Day 2: Load Charts and Capacity Calculations

- Reading load charts: radius, boom length, and capacity
- Factors affecting lifting capacity: angle, extension, stability
- Outrigger setup and ground bearing pressure
- Practical exercise: calculating safe loads from charts
- Consequences of overloading and tipping

Day 3: Pre-Operational Inspections and Maintenance

- Daily inspection procedures: visual and functional checks
- Hydraulic system checks: fluid levels, leaks, hoses
- Structural integrity: cracks, deformation, loose bolts
- Safety devices: overload protection, emergency stops
- Lubrication points and greasing schedules
- Documentation and reporting defects

Day 4: Crane Controls and Basic Operation

- Control layout: joysticks, levers, foot pedals
- Hydraulic circuit basics: pump, valves, cylinders
- Starting and stopping the crane safely
- Basic manoeuvres: lifting, lowering, slewing
- Hand signals and communication with ground crew
- Common mistakes and corrective actions

Day 5: Rigging and Load Handling Techniques

- Types of slings: wire rope, synthetic, chain
- Inspection criteria and rejection standards
- Hitch configurations and safe working loads
- Sling angle factor calculations
- Load centre of gravity and balance
- Tag lines and load control

Day 6: Lifting Operations and Load Stability

- Lift planning: risk assessment and method statements
- Controlling load swing and pendulum effects
- Effects of wind on load stability
- Multi-point lifting and spreader beams
- Practical exercise: lifting awkward loads
- Emergency stop procedures

Day 7: Working at Heights and Confined Spaces

- Fall protection: harnesses, lanyards, anchor points
- Working from crane baskets and platforms
- Confined space risks and atmospheric monitoring
- Permit-to-work systems
- Rescue plans and equipment
- Practical exercise: simulated elevated lift

Day 8: Load Securement and Transportation

- National Road Traffic Act requirements
- Tie-down methods: chains, straps, binders
- Blocking and bracing techniques
- Axle load limits and overhang restrictions
- Pre-trip inspection for transport
- Documentation: load manifests, permits

Day 9: Advanced Manoeuvres and Precision Lifting

- Simultaneous boom, hoist, and slew operations
- Lifting in obstructed areas
- Using remote controls for fine positioning
- Handling loads near structures or personnel
- Practical exercise: precision placement of load

Day 10: Emergency Procedures and Incident Management

- Emergency response plans and drills
- Hydraulic system failure: safe lowering methods
- Electrical contact with power lines
- Crane tipping: causes and actions
- Fire extinguisher use and fire prevention
- First aid for crush injuries and falls
- Incident reporting to DoEL and manufacturer

Day 11: Site-Specific Risk Assessments and Method Statements

- Risk assessment process: hazard identification, risk rating
- Ground conditions: bearing capacity, slopes, excavations
- Overhead obstructions: power lines, structures
- Environmental factors: weather, lighting, noise
- Writing a method statement
- Practical exercise: risk assessment for a scenario

Day 12: Operator Responsibilities and Communication

- Operator's legal responsibilities under OHS Act
- Communication protocols: radio etiquette, hand signals
- Working with signal persons and riggers
- Reporting near misses and unsafe conditions
- Teamwork and situational awareness
- Practical exercise: communication drills

Day 13: Practical Assessment Preparation

- Full crane operation sequence: inspection, setup, lift, transport
- Simulated load chart calculations
- Rigging and sling selection practice
- Emergency scenario drills
- Performance feedback and coaching
- Final Q&A; session

Day 14: Formative Practical Assessment

- Assessment of pre-start inspection
- Lifting tasks: various loads, angles, radii
- Rigging and signalling assessment
- Load securement for road transport
- Emergency shutdown and lowering
- Assessor feedback and documentation

Day 15: Knowledge Assessment and Review

- Written assessment: legislation, safety, load charts
- Case study analysis: causes and prevention
- Group discussion on best practices
- Review of critical knowledge areas
- Individual feedback on assessment results

Day 16: Remedial Training (if needed) or Advanced Specialisation

- Remedial sessions for weak areas
- Advanced rigging: multi-crane lifts
- Offshore and marine crane operations
- Working with hydraulic attachments (grabs, magnets)
- Practical exercises tailored to learner needs

Day 17: Final Summative Assessment and Certification

- Final practical assessment: comprehensive operation
- Final theory assessment (if remedial needed)
- Assessment outcome review
- Issuance of certificate and logbook
- Continuing professional development options
- Course evaluation and closing

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 **20 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 53,800.00	R 53,800.00
1	In-House	R 69,900.00	R 69,900.00
1	On-Campus (Pretoria)	R 80,700.00	R 80,700.00

UPCOMING SESSIONS

Start	End	Method	Venue
04 Aug 2026	26 Aug 2026	On-Campus	Cape Town, South Africa
05 Aug 2026	27 Aug 2026	On-Campus	Dubai, UAE
06 Aug 2026	28 Aug 2026	On-Campus	Pretoria, South Africa
06 Aug 2026	28 Aug 2026	On-Campus	Lagos, Nigeria
07 Aug 2026	31 Aug 2026	On-Campus	Johannesburg, South Africa
10 Aug 2026	01 Sep 2026	On-Campus	Cape Town, South Africa
11 Aug 2026	02 Sep 2026	On-Campus	Dubai, UAE
12 Aug 2026	03 Sep 2026	On-Campus	Pretoria, South Africa

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 116253) 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