



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

Agricultural Drive Train Component Removal and Installation

Agriculture and Nature Conservation / Secondary Agriculture

Unit Standard 246760 · NQF Level 2 · 8 Credits · 5 Days

COURSE OVERVIEW

This course equips learners with the skills to safely remove, dismantle, and install drive train components on agricultural equipment. Participants will gain practical knowledge of mechanical systems, diagnostic procedures, and industry best practices to ensure equipment reliability and compliance with safety standards.

Category	Agriculture and Nature Conservation
Subfield	Secondary Agriculture
Unit Standard	246760
Accreditation	SAQA Accredited · NQF Level 2 · 8 Credits
Duration	5 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply safety procedures and use appropriate personal protective equipment when working on agricultural drive train components.
- Demonstrate the correct techniques for removing and dismantling drive train components, including gearboxes, differentials, and final drives.
- Analyze wear patterns and diagnose faults in drive train systems using inspection and measurement tools.
- Implement proper reassembly and installation procedures, including torque specifications and alignment checks.
- Evaluate the performance of repaired drive train systems through operational testing and adjustment.
- Document maintenance activities and report findings in accordance with workplace procedures.

WHO SHOULD ATTEND

- This course is designed for agricultural technicians, mechanics, and maintenance personnel who are responsible for servicing and repairing drive train systems on tractors, harvesters, and other farm machinery.

COURSE OUTLINE

Day 1: Introduction to Drive Train Systems and Safety

- Overview of agricultural drive trains: gearboxes, differentials, PTO shafts, clutches, and final drives.
- Principles of torque, power, and speed in drive lines.
- Safety regulations, lockout/tagout, and safe handling of heavy components.
- Introduction to service manuals and parts catalogues.
- Common tools and equipment: pullers, presses, torque wrenches, and lifting gear.
- Identification of component wear and failure modes.

Day 2: Drive Train Component Removal Procedures

- Step-by-step removal of PTO shafts, universal joints, and slip clutches.
- Removal of gearboxes and differentials: drain lubricants, disconnect linkages, and support loads.
- Use of hydraulic jacks, engine hoists, and lifting slings.
- Cleaning and tagging removed components.
- Inspection checklists for bearings, seals, gears, and splines.
- Recording measurements and anomalies before disassembly.

Day 3: Drive Train Component Disassembly and Inspection

- Disassembly of gearboxes: removing covers, extracting gears and shafts.
- Inspection of bearings, gears, synchronisers, and seals.
- Use of micrometers, dial indicators, and feeler gauges.
- Wear limit specifications and decision-making for replacement.
- Cleaning methods and solvent safety.
- Organising parts for reassembly.

Day 4: Drive Train Component Installation and Adjustment

- Reassembly of gearboxes: bearing installation, shimming, and gear mesh patterns.
- Installation of seals, gaskets, and locking devices.
- Torque specifications and tightening sequences.
- Aligning PTO shafts and universal joints.
- Adjusting clutch free-play and brake bands.
- Filling lubricants and checking for leaks.

Day 5: Final Testing, Troubleshooting, and Documentation

- Operational tests: noise, vibration, temperature, and leak checks.
- Troubleshooting common issues: misalignment, insufficient lubrication, and worn components.
- Re-testing after adjustments.
- Filling in job cards, service logs, and defect reports.
- Final safety inspection and sign-off.
- Course review and assessment preparation.

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 **8 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 23,000.00	R 23,000.00
1	In-House	R 29,900.00	R 29,900.00
1	On-Campus (Pretoria)	R 34,500.00	R 34,500.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	14 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Pretoria, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Dubai, UAE
10 Aug 2026	14 Aug 2026	On-Campus	Cape Town, South Africa
10 Aug 2026	14 Aug 2026	On-Campus	Mauritius
17 Aug 2026	21 Aug 2026	On-Campus	Dubai, UAE
17 Aug 2026	21 Aug 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 246760) 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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