



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

Mechanical Power Transfer Principles

Manufacturing, Engineering and Technology / Fabrication and Extraction

Unit Standard 243762 · NQF Level 1 · 2 Credits · 1 Day

COURSE OVERVIEW

This course equips learners with a foundational understanding of the principles governing mechanical power transfer, including the operation of gears, belts, chains, and couplings. Participants will gain the knowledge to identify, describe, and apply these principles in industrial settings, ensuring safe and efficient power transmission.

Category	Manufacturing, Engineering and Technology
Subfield	Fabrication and Extraction
Unit Standard	243762
Accreditation	SAQA Accredited · NQF Level 1 · 2 Credits
Duration	1 day
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Describe the basic principles of mechanical power transfer, including torque, speed, and power relationships.
- Identify and differentiate between common power transfer components such as gears, belts, chains, and couplings.
- Apply safety procedures when working with mechanical power transfer systems.
- Analyze the effect of gear ratios on speed and torque in a simple transmission system.
- Demonstrate the correct method for inspecting and maintaining belt and chain drives.
- Evaluate the suitability of different power transfer methods for specific applications.

WHO SHOULD ATTEND

- This course is designed for maintenance technicians, mechanical fitters, and engineering learners who require a practical understanding of mechanical power transfer systems in manufacturing or industrial environments.

COURSE OUTLINE

Day 1: Fundamentals of Mechanical Power Transfer

- Introduction to mechanical power transfer: definitions and importance.
- Types of drives: belt, chain, gear, and shaft drives.
- Key components: pulleys, sprockets, gears, couplings, and bearings.
- Power, torque, and speed relationships: formulas and calculations.
- Efficiency and losses in power transmission.
- Lubrication principles for mechanical drives.
- Safety considerations and personal protective equipment (PPE).
- Overview of maintenance practices for mechanical power systems.

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 **2 NQF credits** at **NQF Level 1**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 12,800.00	R 12,800.00
1	In-House	R 16,600.00	R 16,600.00
1	On-Campus (Pretoria)	R 19,200.00	R 19,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
04 Aug 2026	04 Aug 2026	On-Campus	Mauritius
05 Aug 2026	05 Aug 2026	On-Campus	Cape Town, South Africa
06 Aug 2026	06 Aug 2026	On-Campus	Dubai, UAE
07 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
07 Aug 2026	07 Aug 2026	On-Campus	Lagos, Nigeria
10 Aug 2026	10 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	10 Aug 2026	On-Campus	Mauritius
11 Aug 2026	11 Aug 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 QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 243762) 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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