



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

Animal Nutrition Principles And Fundamentals Training

Agriculture and Nature Conservation / Primary Agriculture

Unit Standard 116055 · NQF Level 2 · 7 Credits · 4 Days

COURSE OVERVIEW

This course provides a comprehensive understanding of the principles and fundamentals of animal nutrition, enabling learners to apply nutritional concepts to enhance animal health and productivity. It covers essential topics such as nutrient requirements, feed formulation, and digestion processes, tailored for the South African agricultural context.

Category	Agriculture and Nature Conservation
Subfield	Primary Agriculture
Unit Standard	116055
Accreditation	SAQA Accredited · NQF Level 2 · 7 Credits
Duration	4 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply the basic principles of animal nutrition to evaluate feed quality and nutrient requirements.
- Analyze the digestive processes of different animal species to optimize feeding strategies.
- Evaluate the nutritional content of common feedstuffs using appropriate methods.
- Design balanced rations for various classes of livestock based on their nutritional needs.
- Implement feeding programs that promote animal health, growth, and production efficiency.
- Demonstrate understanding of the relationship between nutrition and animal performance.

WHO SHOULD ATTEND

- This course is designed for livestock farmers, animal health workers, agricultural extension officers, and anyone involved in animal production who seeks to improve their knowledge of animal nutrition principles.

COURSE OUTLINE

Day 1: Foundations of Animal Nutrition

- Introduction to animal nutrition: definitions and importance.
- The six nutrient classes: carbohydrates, proteins, fats, vitamins, minerals, and water.
- Digestive system anatomy and physiology: monogastric vs. ruminant.
- Energy metabolism: gross energy, digestible energy, metabolisable energy, net energy.
- Factors affecting feed intake and nutrient utilisation.
- Overview of nutritional requirements for maintenance, growth, reproduction, and lactation.

Day 2: Feed Evaluation and Nutrient Requirements

- Feedstuff classification: forages, concentrates, by-products, and additives.
- Proximate analysis: moisture, crude protein, crude fibre, ether extract, ash, nitrogen-free extract.
- Digestibility trials and feeding standards (e.g., NRC, ARC).
- Nutrient requirement tables for cattle, sheep, goats, pigs, and poultry.
- Introduction to ration formulation using the Pearson square method.
- Feed processing and its effect on nutrient availability.
- Anti-nutritional factors and feed toxins.

Day 3: Applied Nutrition for Production Systems

- Feeding for growth: protein-energy interactions and amino acid balance.
- Nutrition and reproduction: effects on fertility, gestation, and neonatal health.
- Lactation nutrition: milk composition and yield, energy demands.
- Metabolic disorders: ketosis, milk fever, bloat, acidosis – causes and prevention.
- Feed additives: probiotics, enzymes, buffers, ionophores, and growth promoters.
- Nutrition under heat stress and other environmental challenges.
- Organic and sustainable feeding practices.

Day 4: Practical Integration and Industry Application

- Hands-on ration formulation using computer software or manual calculations.
- Case studies: dairy cow, broiler, pig grower, and lamb finisher rations.
- Feed budgeting and storage management.
- Cost analysis: feed cost per unit of production, break-even analysis.
- Quality assurance: feed safety, mycotoxins, and regulatory compliance.
- Record keeping and monitoring feed efficiency.
- Group exercise: design a feeding programme for a given farm scenario.
- Course review and assessment.

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 **7 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 20,500.00	R 20,500.00
1	In-House	R 26,600.00	R 26,600.00
1	On-Campus (Pretoria)	R 30,800.00	R 30,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
10 Aug 2026	13 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	13 Aug 2026	On-Campus	Abu Dhabi, UAE
10 Aug 2026	13 Aug 2026	On-Campus	Pretoria, South Africa
10 Aug 2026	13 Aug 2026	On-Campus	Dubai, UAE
10 Aug 2026	13 Aug 2026	On-Campus	Cape Town, South Africa
10 Aug 2026	13 Aug 2026	On-Campus	Mauritius
18 Aug 2026	21 Aug 2026	On-Campus	Dubai, UAE
18 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 116055) 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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