



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

Mathematical Language And Calculations For Business Applications Training

Services / Transport, Operations and Logistics

Unit Standard 110084 · NQF Level 1 · 14 Credits · 11 Days

COURSE OVERVIEW

This course equips learners with the mathematical language and computational skills necessary for effective business decision-making. Participants will develop the ability to interpret, apply, and communicate mathematical concepts in financial and operational contexts, enhancing their analytical and problem-solving capabilities in the workplace.

Category	Services
Subfield	Transport, Operations and Logistics
Unit Standard	110084
Accreditation	SAQA Accredited · NQF Level 1 · 14 Credits
Duration	11 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply basic mathematical operations and formulas to solve business problems.
- Analyze financial data using ratios, percentages, and statistical measures.
- Evaluate business scenarios through break-even analysis, budgeting, and forecasting.
- Demonstrate proficiency in using spreadsheets for mathematical modelling and data interpretation.
- Communicate mathematical findings clearly in business reports and presentations.
- Implement mathematical techniques to optimize resource allocation and cost control.

WHO SHOULD ATTEND

- This course is designed for professionals in finance, accounting, operations, and management roles who need to apply mathematical calculations in business contexts.
- It is also suitable for individuals seeking to improve their numerical literacy for career advancement.

COURSE OUTLINE

Day 1: Foundations of Mathematical Language

- Introduction to mathematical language and its importance in business
- Basic symbols: +, -, ×, ÷, =, ≠, <, >, ≤, ≥
- Number systems: whole numbers, integers, fractions, decimals, percentages
- Rounding and estimation techniques
- Reading and writing numbers in business documents

Day 2: Fundamental Arithmetic Operations

- Review of arithmetic operations
- Order of operations: brackets, orders, division, multiplication, addition, subtraction
- Practical business examples: calculating totals, differences, products, and quotients
- Checking calculations: estimation and inverse operations

Day 3: Fractions, Decimals, and Percentages

- Conversions: fraction to decimal, decimal to percentage, etc.
- Operations with fractions: addition, subtraction, multiplication, division
- Percentage increase and decrease
- Business applications: VAT, discounts, profit margins, interest rates

Day 4: Ratios and Proportions

- Definition and notation of ratios
- Simplifying ratios and finding equivalent ratios
- Direct and inverse proportions
- Rates: speed, unit pricing, exchange rates
- Business examples: mixing ingredients, cost allocation, currency conversion

Day 5: Basic Algebra for Business

- Variables, constants, and coefficients
- Translating words into algebraic expressions
- Solving linear equations: balancing method
- Common business formulas: profit = revenue - cost, simple interest $I = PRT$
- Substitution and evaluation

Day 6: Data Handling and Basic Statistics

- Types of data: categorical and numerical
- Frequency tables and tally marks
- Graphical representation: bar charts, pie charts, line graphs
- Mean, median, mode, and range
- Introduction to probability: likelihood and expected outcomes

Day 7: Financial Mathematics – Interest and Depreciation

- Simple interest formula: $I = PRT$ and $A = P(1 + RT)$
- Compound interest formula: $A = P(1 + i)^n$
- Comparison of simple vs compound interest
- Depreciation: straight-line and reducing balance
- Business applications: loan repayments, investment growth, asset value

Day 8: Budgeting and Costing

- Elements of a budget: income, expenses, surplus/deficit
- Fixed costs vs variable costs
- Contribution margin and break-even analysis
- Cost-volume-profit relationships
- Practical budgeting exercise for a small business

Day 9: Invoicing and Inventory Calculations

- Invoice components: unit price, quantity, VAT, discounts
- Trade discounts and cash discounts
- Inventory valuation: FIFO, LIFO, weighted average cost
- Economic order quantity (EOQ) concept
- Stocktaking and variance analysis

Day 10: Business Performance Metrics

- KPIs: gross profit margin, net profit margin, return on investment (ROI)
- Liquidity ratios: current ratio, quick ratio
- Efficiency ratios: stock turnover, debtor days
- Trend analysis using index numbers
- Creating a performance dashboard

Day 11: Integration and Capstone Application

- Review of key concepts from Days 1-10
- Capstone project: run a simulated business (budgeting, pricing, inventory, performance)
- Problem-solving strategies
- Presentation of results and peer feedback
- Final 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 **14 NQF credits** at **NQF Level 1**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 38,400.00	R 38,400.00
1	In-House	R 49,900.00	R 49,900.00
1	On-Campus (Pretoria)	R 57,600.00	R 57,600.00

UPCOMING SESSIONS

Start	End	Method	Venue
04 Aug 2026	18 Aug 2026	On-Campus	Mauritius
05 Aug 2026	19 Aug 2026	On-Campus	Pretoria, South Africa
05 Aug 2026	19 Aug 2026	On-Campus	Lagos, Nigeria
06 Aug 2026	20 Aug 2026	On-Campus	Cape Town, South Africa
07 Aug 2026	21 Aug 2026	On-Campus	Johannesburg, South Africa
10 Aug 2026	24 Aug 2026	On-Campus	Cape Town, South Africa
11 Aug 2026	25 Aug 2026	On-Campus	Abu Dhabi, UAE
12 Aug 2026	26 Aug 2026	On-Campus	Dubai, UAE

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 110084) 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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