



# **AI and Data Analytics Course Using Excel, Copilot and ChatGPT Table Of Contents**

By

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# **AI and Data Analytics Course Using Excel, Copilot and ChatGPT**

## **Executive Summary**

### **Programme Positioning**

This practical corporate programme teaches employees and managers how to use Excel, Microsoft Copilot and ChatGPT to support data analysis, reporting and decision-making while maintaining reporting accuracy, data validation and human accountability.

The programme is not a technical data science course and does not require programming, coding or statistical modelling experience.

Instead, it focuses on helping business professionals work more productively with data, reports, dashboards and AI tools while maintaining responsibility for the quality and accuracy of their outputs.

### **Why This Programme Exists**

AI can significantly improve reporting productivity, data analysis and business decision-making. The risk is that professional-looking AI output can create false confidence, resulting in incorrect reports, poor decisions, financial errors and compliance issues.

Many employees are already using ChatGPT and Microsoft Copilot to support reporting, analysis and workplace productivity.

However, AI cannot verify business context, understand organisational objectives or accept responsibility for outcomes.

This programme teaches employees how to use AI to support analysis while maintaining responsibility for validating data, testing assumptions and making business decisions.

**AI can assist with analysis.**

**Humans remain accountable for the outcome.**

### **Core Principles**

AI generates language, not the truth.

AI supports decisions, humans remain responsible.

AI suggests, Excel proves.

Human judgement, business context and accountability cannot be delegated to AI.

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## Who This Is For

This programme is designed for business professionals who work with data, reports, spreadsheets, dashboards and business information as part of their daily responsibilities.

Typical attendees include:

- Finance managers, accountants, analysts and reporting teams responsible for budgets, forecasts, management accounts and business performance reporting
- HR professionals who analyse workforce data, employee trends, leave information, training records and people-related reporting
- Administrative professionals who prepare reports, maintain spreadsheets, compile information and support operational decision-making
- Managers and supervisors who rely on dashboards, KPIs and business reports to make informed decisions
- Operations and business support teams responsible for analysing performance, identifying trends and improving productivity
- Excel users who want to use Microsoft Copilot and ChatGPT more effectively while maintaining reporting accuracy and accountability
- Organisations introducing AI tools into reporting, analysis and decision-support processes while requiring appropriate governance and human oversight

No programming, coding or data science background is required.

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## Learning Outcomes

By the end of this programme, participants will be able to:

- Use ChatGPT and Microsoft Copilot to support data analysis and reporting activities
  - Apply structured prompting techniques to obtain more useful analytical outputs
  - Interpret dashboards, KPIs and business reports more effectively
  - Validate AI-generated insights before using them in business decisions
  - Use Excel, Copilot and ChatGPT together to improve reporting productivity
  - Recognise AI hallucinations, reporting errors and confidently incorrect outputs
  - Apply POPIA-aware practices when using AI with workplace information
  - Implement practical AI governance and verification techniques within their teams
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## **Course Modules**

### **Module 1: What AI Really Is in Data Analysis and Reporting**

- AI in business reporting
  - AI vs traditional analysis
  - AI supports decisions, humans remain responsible
  - AI generates language, not the truth
  - Understanding AI limitations
  - Human accountability and ownership of outcomes
- 

### **Module 2: Data Quality, POPIA and Safe AI Use**

- Data quality principles
  - Data classification
  - POPIA considerations
  - Safe prompting
  - Confidential information risks
  - Garbage in, garbage out
  - Responsible use of business information
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### **Module 3: ChatGPT for Data Analysis and Reporting**

- Analysing datasets
  - Uploading Excel data into ChatGPT
  - Identifying trends
  - Explaining results
  - Creating management summaries
  - Drafting executive commentary
  - Asking better analytical questions
  - Practical prompting framework
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## **Module 4: Microsoft Copilot for Excel and Data Analysis**

- Copilot in Excel
  - Chat First, Edit Later methodology
  - Data summaries
  - Formula assistance
  - Charts and visualisation
  - Business reporting
  - Saving workbooks before prompting
  - Copilot limitations
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## **Module 5: Excel Skills Required for AI Success**

- Why Excel still matters
  - Structured data
  - Tables and PivotTables
  - Understanding formulas
  - Understanding formulas before trusting AI outputs
  - Data validation
  - If you don't understand the formula, you can't trust the result
  - AI Suggests → Excel Proves
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## **Module 6: Dashboards, Reporting and Business Insights**

- KPI analysis
- Dashboard interpretation
- Variance analysis
- Trend reporting
- Identifying trends and anomalies
- Executive summaries

- Communicating insights to management
  - Building executive-ready summaries
  - Turning data into decisions
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### **Module 7: AI Errors, Hallucinations and Data Validation**

- Confidently wrong answers
  - Hallucinations
  - Validation techniques
  - Cross-checking outputs
  - Testing assumptions
  - Reporting accuracy framework
  - Verification workflows
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### **Module 8: Responsible AI Use and Workplace Guidelines**

- Governance principles
  - Role-based applications
    - o Finance
    - o HR
    - o Administration
    - o Management
  - Approval workflows
  - AI workplace policies
  - Implementation roadmap
  - Practical workplace implementation
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### **Appendix and Bonus Resources**

The following practical tools and resources are included with the programme:

- AI Data Validation Checklist
- AI Reporting Accuracy Checklist


- Excel Validation Checklist
- AI Reporting Review Checklist
- AI Data Analysis Prompt Library

### **Additional Resources Available**

Should you require any of the above resources as standalone workplace tools, please contact College Africa Group.

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Selected resources may be available as complimentary downloads or implementation tools from College Africa Group.

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### **Additional Resources from College Africa Group**

#### **AI in the Workplace Training**

<https://collegeafricagroup.com/ai-in-the-workplace-training/>

#### **ChatGPT for Business Course**

<https://collegeafricagroup.com/chatgpt-for-business-course-south-africa/>

#### **Microsoft Copilot Training South Africa**

<https://collegeafricagroup.com/microsoft-copilot-training-south-africa/>

#### **AI and Data Analytics Course**

<https://collegeafricagroup.com/ai-and-data-analytics-course/>

#### **AI & ChatGPT Consultancy South Africa**

<https://collegeafricagroup.com/ai-chatgpt-consultancy-south-africa-2/>

#### **Advanced Excel Executive Training**

<https://collegeafricagroup.com/ms-excel/ms-excel-advanced/advanced-excel-executive/>

#### **Excel Dashboard Training**

<https://collegeafricagroup.com/ms-excel/ms-excel-advanced/excel-dashboard/>

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## **ARNOLD MUSCAT**

Obtained a Bachelor of Commerce degree majoring in Business Management and Economics (UNISA). He also obtained a First Class pass with Institute of Marketing Management (IMM). He has worked in the financial, sales, marketing, manufacturing, production and retail industries attaining positions of General Manager, Finance Director and Managing Director.

Arnold began using spreadsheets in the 1980's when Microsoft Office was being introduced into the workplace and has been a continuous and progressive user of MS office and related programs for the past 20 years.

He has been involved with training since 2003 and is the Managing Director and co-owner of College Africa Group, a national training company in Southern Africa.

You can learn more about Arnold at [www.arnoldmuscat.co.za](http://www.arnoldmuscat.co.za) and Facebook and LinkedIn.



## **JENNY MUSCAT**

Obtained a Bachelor of Commerce degree majoring in Business Management and Industrial Psychology. She also obtained a Diploma in Public Relations and in Real Estate.

She has worked in banking and foreign exchange, marketing, public relations, logistics planning, project management, operations in the transport industry and real estate attaining positions of General Manager and Director.

Jenny has been involved with project management for more than 30 years which included Rugby World Cup 1995 and World Cup Soccer 2010 held in South Africa.

She joined the training industry in 2008 and is currently a director and co-owner of College Africa Group, a national training company in Southern Africa.

You can learn more about Jenny at [www.jennymuscat.co.za](http://www.jennymuscat.co.za)

