



KNOWLES Advisory & Consulting



# Data Wizardry

## AI-Powered Analytics from Zero to Hero

*Turn Raw Data into Powerful Insights with AI*

🕒 4 Days | 3 Hours Live per Day | 📅 3 Batches/Year | 📅 TBD | 💰 ₹15,000

### ◆ COURSE OVERVIEW

Data Wizardry is an intensive, hands-on four-day course that transforms complete beginners into confident data analysts using the power of AI. You will master Excel with AI co-pilots, learn to work with Bricks AI and Claude for data interpretation, and build interactive dashboards that tell compelling stories. Whether you work in an NGO, corporate, or academic setting, this course will supercharge your analytical capabilities.

### ◆ COURSE MODULES - 4 DAYS × 3 HOURS

#### 📅 Module 1: Excel Mastery with AI Co-Pilots & Data Cleaning 🕒 3 Hours

##### 📖 LECTURE CONTENT (90 min)

- Excel essentials refresher: advanced formulas, pivot tables, and dynamic arrays
- Bricks AI: your AI-powered spreadsheet - overview and key features
- AI-generated formulas and functions: prompting Excel with natural language
- Smart autofill, pattern recognition, and collaborative spreadsheets with spreadsheet AI
- Identifying and fixing dirty data with AI-assisted quality assessment using Claude
- Claude for data quality checking: detecting outliers, duplicates, and errors
- Automated data validation techniques and building reusable cleaning templates
- Merging, reshaping, and transforming datasets with Claude AI guidance

##### 👥 GROUP WORK & PRACTICALS (90 min)

- Excel challenge: participants fix a messy dataset using AI-generated formulas in Bricks
- Group exercise: use Claude to assess data quality on a real NGO dataset
- Build a reusable data cleaning template collaboratively using Bricks AI suggestions
- Debrief: compare manual vs AI-assisted data cleaning time and quality



## Module 2: AI-Powered Data Visualisation & Interactive Dashboards 🌟 3

Hours

### 📄 LECTURE CONTENT (90 min)

- Choosing the right chart with AI guidance: when to use what
- Creating stunning visuals in Bricks AI: bar, line, scatter, heatmaps etc.
- Diagramming AI for professional infographics and process flow charts
- Interactive charts, slicers, and storytelling with data visualisations
- Dashboard design principles: layout, colour, and visual hierarchy with AI
- Building KPI trackers with AI-generated formulas in Bricks
- Real-time data connections, automation, and sharing AI-powered dashboards
- Claude for narrative interpretation of dashboard insights

### 👥 GROUP WORK & PRACTICALS (90 min)

- Hands-on: build a 3-panel interactive dashboard using Bricks AI from the provided data
- Group challenge: create a Diagramming AI infographic for a development programme
- Use Claude to write an executive narrative explaining your dashboard findings
- Peer review: critique each other's dashboards and suggest AI-driven improvements



## Module 3: Machine Learning Basics with AI & Statistical Analysis 🌟 3

Hours

### 📄 LECTURE CONTENT (90 min)

- What is ML? Demystified with Claude explanations for non-technical audiences
- Regression and classification: AI-guided conceptual overview
- Using AI to select the right ML approach for your data problem
- Interpreting ML model outputs with Claude: what the numbers really mean
- No-code ML tools for non-programmers: overview and practical application
- Excel for statistical analysis: descriptive stats, correlation, and regression basics
- Julius AI for uploading datasets and generating instant statistical summaries
- Understanding confidence intervals, p-values, and significance with AI explanations

### 👥 GROUP WORK & PRACTICALS (90 min)

- Julius AI exercise: upload a dataset and generate a complete statistical summary
- Group challenge: use Claude to interpret regression output from an Excel analysis
- Apply a no-code ML tool to predict an outcome from a simple programme dataset
- Teams present findings from their ML exploration to the group



### LECTURE CONTENT (90 min)

- Building automated report templates in Excel with Claude AI integration
- Claude for narrative data interpretation: generating executive summaries
- Scheduled report generation workflows and automation pipelines using Claude
- Gamma for transforming data reports into presentation-ready slide decks
- Presentation AI for polishing data stories for diverse audiences
- Data communication for non-technical audiences: simplifying with AI
- Building your personal AI analytics workflow: putting it all together

### GROUP WORK & PRACTICALS (90 min)

- Build a fully automated report template using Bricks AI on participants' own data
- Generate an AI-powered executive summary using Claude from raw data output
- Create a Gamma presentation from your data findings — present to the group
- Final challenge: full data analysis pipeline from raw Excel to polished AI report

## ◆ LEARNING OUTCOMES

- Perform advanced Excel operations with AI co-pilot assistance using Bricks AI
- Clean, transform and analyse messy datasets efficiently using AI tools
- Build interactive dashboards that update automatically using Bricks AI
- Interpret statistical results and ML outputs using Claude explanations
- Apply basic machine learning concepts to real datasets with AI guidance
- Generate automated reports and presentations using Claude, Gamma, and Bricks AI

## ◆ TOOLS & TECHNOLOGIES

Excel + Bricks AI

Claude

Julius AI

Gamma

Presentation AI

Diagramming AI

## ◆ WHO SHOULD ATTEND

Entry to mid-level professionals, NGO staff, Graduate students