

25 -

Certificate in Data Analytics

Data Analytics

Earn 14 PD Hours

Learn to create reliable, interactive reports and dashboards that effortlessly extract, transform, load, and analyze data from multiple large and diverse data sources with just a click.

This course will guide you in producing interactive Power Pivot charts, dashboards, and flexible Excel layouts, all powered by Power Query automation and Power Pivot data models utilizing the same robust Vertipaq database engine found in Power BI and other Microsoft enterprise software.

Engage in hands-on development using Excel, working through a case study that takes you from raw data to creating a comprehensive analytical reporting solution. Power BI desktop will also be used to demonstrate skills transfer of what you learn in Excel (but is not required for the hands-on work). Join us to enhance your skills and transform your data analysis capabilities!

Topics Include:

- Introduction, Method and Alternative Approaches
- Getting Data: Extract, Transform and Load with Power Query
- Data Modelling: Building Data Models with Power Pivot
- Data Visualisation: Reporting, Exploration and Analysis Using Pivot Charts and Dashboards
- Flexible Hybrid Models: Combining Power Pivot Data and Charts with Traditional Excel
- Power BI: Applying What You Learnt Already to Power BI
- Other Challenges, More Advanced Tools and Techniques

Delivery Methods:

Virtual Instructor Led Learning

Key Takeaways

Upon completion of this certificate, you will learn:

- A method and design rules for creating the most effective, efficient, and reliable data models and reports/dashboards.
- How to connect to data sources (including databases and folders with multiple files) using Power Query for data extraction, transformation, and loading.
- How to design and build diverse data structures, from simple single tables to complex normalized multi-table models that ensure data integrity and ease of maintenance.
- How to create key metrics and measures using DAX, short code, and no-code approaches.
- When and why to use data visualization and dashboards, which visuals enhance interpretation, and how to structure dashboards for storytelling.

Who Will Benefit

This course benefits accounting professionals, controllers, and others looking to:

• Automate reporting.

- Build easily analyzable models.
- Present data in various formats.
- Provide self-service solutions to business users.
- Gain Power Query and Power Pivot skills applicable to Microsoft Power BI development.

Prerequisite(s)

The course is suitable for all experience levels and participants should expect to work on different skills and techniques than they may have used in traditional Excel, including some more technical concepts.

Earn a Digital Badge



Our new collection of digital badges can be earned through the completion of any of our certificate programs offered in our professional development catalogue. Collect these digital badges to add to your website, social profiles, email signature and more. These badges are an easy way to visually communicate your skills and accomplishments to your peers and network. Digital badges will be awarded based on course completion requirements.

Certificate Outline

Please note session topic distribution may change depending on course delivery method.

Introduction, Method and Alternative Approaches

- How and why to use Power Query and Power Pivot to tackle limitations in traditional Excel and new opportunities for reporting and analysis.
- Alternative approaches to simple/sophisticated solutions.
- Case study problem(s) and methods to follow from raw data to solution.

Getting Data: Extract, Transform and Load with Power Query

- Connecting to multiple data sources and extracting, cleaning, enhancing and transforming into the structures you need using Power Query.
- Learn how to tackle raw data in; individual files, folders of multiple files at once, databases and in other queries/models.

Data Modelling: Building Data Models with Power Pivot

- Single table, star and 'snowflake' pattern models
- Data measures (KPIs) with simple DAX language coding or non- coding alternatives.
- How design choices affect use, maintenance and reporting/analysis.
- Build data models to connect data that is already loaded.

Day 3

Day 2

Day 1

Data Visualization: Reporting, Exploration and Analysis Using Pivot Charts and Dashboards

- Good practice visualization and structure.
- Why some popular visuals aren't effective for interpretation and what to use instead.
- Hands on building an analytical dashboard for our case study.

Flexible Hybrid Models: Combining Power Pivot Data and Charts with Traditional Excel

- Power Query and Power Pivot data models and automation without being limited to tabular pivot reports and pivot charts.
- Getting your data into free format Excel layout and mixing with traditional Excel for complete flexibility in reporting (while retaining key interactivity).
- How to create hybrid reporting.

Power BI: Applying What You Learnt Already to Power BI

• Introduction to Power BI desktop and how most of the above (other than hybrid models) can be applied directly to building models in Power BI.

Other Challenges, More Advanced Tools and Techniques

- Examples and illustration of how to approach more advanced problems with different data sets and challenges, more complex models and the power of more advanced DAX language.
- Identify where to draw the line between user/specialist development.
- How to simplify the approach if you don't have support/capability for more technical development.

Wrap Up and Next Steps

 Suggestions on projects and approaches to developing your skills and application of what's been covered and to developing your capability in data analytics.



To earn your CPD hours and Digital Badge you must attend all sessions. We understand that sometimes unplanned absences happen. Please reach out to our <u>Operations Team</u> if you're unable to attend a session as scheduled.

<u>Day</u> 4



ABOUT YOUR INSTRUCTOR Simon Lindley

Simon Lindley, is an international trainer, speaker and consultant in business transformation through analytics. He brings expertise in data analytics, visualization and dashboard design to transform the role and performance of finance teams. Simon is a Chartered Accountant, Chartered Engineer (IT) and MBA with a Masters Diploma in corporate governance. He also has training and qualifications in statistics and data science. In addition to training Simon has worked as a project/ commercial manager for business and finance transformation projects for large corporations, Big 4 Accounting and Consulting firms and a major research business.

Need Approval to Attend?

If you need approval to attend the session, please fill out the <u>Employer Request Letter</u>.

Have Questions? Speak to an Advisor.

To speak to one of our advisors, please fill out this <u>form</u>.

