
Analyzing Data with Power BI

Varighet: 5 Days Kurskode: M-DA100 Opplæringsmetoder: Virtuell opplæring

Beskrivelse:

This course will discuss the various methods and best practices that are in line with business and technical requirements for modelling, visualizing, and analysing data with Power BI. The course will also show how to access and process data from a range of data sources including both relational and non-relational data. This course will also explore how to implement proper security standards and policies across the Power BI spectrum including datasets and groups. The course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution. Finally, this course will show how to build paginated reports within the Power BI service and publish them to a workspace for inclusion within Power BI.

Målgruppe:

The audience for this course are data professionals and business intelligence professionals who want to learn how to accurately perform data analysis using Power BI. This course is also targeted toward those individuals who develop reports that visualize data from the data platform technologies that exist on both in the cloud and on-premises.

Agenda:

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| ■ After completing this course, students will be able to: | ■ Apply and perform advanced report analytics |
| ■ Ingest, clean, and transform data | ■ Manage and share report assets |
| ■ Model data for performance and scalability | ■ Create paginated reports in Power BI |
| ■ Design and create reports for data analysis | |
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Forkunnskaper:

- Technical knowledge equivalent to the content of the Azure Fundamentals course (M-AZ-900T01)
- Additional professional experience

Test og sertifisering

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Innhold:

Module 1: Introduction

This module explores the landscape of the Power BI portfolio and describes several use cases for Power BI. The course then identifies and describes the role and responsibilities of a Data Analyst.

- The Power BI Portfolio
- Identifying Tasks of the Data Analyst

Lab : Getting Started

Module 2: Getting and Profiling Data

This module explores identifying and connecting to different data sources. The student will also learn the basics on how to identify and optimize query performance issues. They will also learn how to perform proper data profiling in preparation for the subsequent step of cleaning and shaping the data prior to loading the data.

- Data Sources
- Storage Modes
- Query Performance
- Data Profiling

Lab : Preparing Data in Power BI Desktop

Module 3: Cleaning and Transforming Data

This module teaches the fundamental concepts of designing a data model for proper performance and scalability. It instills in the student a list of items to think about prior to building the model.

- User-Friendliness
- Combining Queries
- Data cleaning and transformation
- Advanced capabilities
- Configuring data loading and resolving errors
- Data modelling basics
- Measures and Dimensions
- Model Performance

Lab : Loading Data in Power BI Desktop

Module 4: Designing a Data Model

This module teaches the fundamental concepts of designing a data model for proper performance and scalability. It instills in the

In this module the student will apply the steps learned in the previous module and build a data model while learning and implementing additional items to create the foundation of the model. The student will be introduced to initial security concepts and the Q;A feature in this module.

- Common data modeling techniques
- Adding columns to support the data model
- Row-level security
- Q;A considerations

Lab : Advanced Data Modeling

Module 6: Creating Model Calculations with DAX

This module first introduces the student to DAX and some of the critical functions and operators necessary to enhance a data model, including the concepts of Measures, and calculated columns and tables, and Time Intelligence.

- Introduction to DAX
- Creating tables and columns
- Measures
- The CALCULATE expression
- Time-Intelligence functions

Lab : Using DAX in Power BI - Part 1, Lab : Using DAX in Power BI - Part 2

Module 7: Optimizing Model Performance

In this module the student is introduced to steps, processes, and concepts necessary to optimize a data model for enterprise-level performance.

- Fine-tune the data model
- Cardinality
- Identifying performance issues

Module 8: Creating Reports

This module introduces the student to the fundamental concepts and principles of building a report, including selecting the correct visuals, designing a page layout, and applying basic but critical functionality including slicing and filtering. This important topic of designing for accessibility is also covered.

- Selecting a visualization

Module 10: Creating Dashboards

In this module the student learns about dashboards and the many features and functionality they contain. The student learns how to take the report they built in the previous module and pin it to a dashboard, then enhance to dashboard for additional usability and insights.

- Dashboard design
- Real-time dashboards
- Dashboard enhancements

Lab : Creating a Power BI Dashboard

Module 11: Enhancing Reports and Applying Advanced Analytics

This module helps the student apply additional features to enhance the report for analytical insights in the data, equipping the student with the steps to use the report for actual data analysis. This module will also arm the student with additional steps and concepts to apply and perform advanced analytics on the report for even deeper and meaningful data insights.

- Navigation
- Basic analysis
- Grouping, binning, and clustering
- Analysis over time
- Advanced analysis

Lab : Data Analysis in Power BI Desktop

Module 12: Managing and Sharing Power BI Assets

In this module the student will learn the concepts of managing Power BI assets, including datasets and workspaces, as well as how to apply role-level security to a dataset. This module teaches the student how to create and manage workspaces, as well as how to share content, including reports and dashboard, and how to distribute an App.

- Dataset management
- Enhancing datasets
- Configure row-level security
- Create and Manage workspaces
- Enhancing datasets and reports in the workspace
- Sharing and distributing content

Lab : Publishing and Sharing Power BI

<p>student a list of items to think about prior to building the model.</p> <ul style="list-style-type: none"> ■ User-Friendliness ■ Combining Queries ■ Data cleaning and transformation ■ Advanced capabilities ■ Configuring data loading and resolving errors ■ Data modelling basics ■ Measures and Dimensions ■ Model Performance <p>Lab : Data Modelling in Power BI Desktop</p> <p>Module 5: Developing a Data Model</p>	<ul style="list-style-type: none"> ■ Configuring visualizations ■ Formatting pages ■ Enhancing the report <p>Lab : Designing a report in Power BI Desktop - Part 1</p> <p>Module 9: Enhancing Reports for Usability and Performance</p> <p>This module helps the student think beyond the basics of report building and discusses topics for enhancing the report for usability and performance. The student will leave this module with knowing that a report is not something to just look at, but is a living canvas that tells a story, and should be designed as such.</p> <ul style="list-style-type: none"> ■ Bookmarks and navigation ■ Designing cohesive pages and interactions ■ Improving reports <p>Lab : Designing a report in Power BI Desktop - Part 2</p>	<p>Content</p> <p>Module 13: Working with Paginated Reports in Power BI</p> <p>This module will teach the student about paginated reports. The student will learn what they are how they fit into the Power BI spectrum, and then look at how to build and publish a report.</p> <ul style="list-style-type: none"> ■ Introduction to Paginated Reports ■ Data sources and datasets ■ Adding visual elements ■ Enhancing and publishing reports <p>Lab : Creating a Paginated report</p>
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Ytterligere informasjon:

For mer informasjon eller kursbooking, vennligst ring oss 22 95 66 00

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