# **Course duration**

4 days

## **Course Benefits**

- Ingest, clean, and transform data
- Model data for performance and scalability
- · Design and create reports for data analysis
- Apply and perform advanced report analytics
- Manage and share report assets
- · Create paginated reports in Power BI

### Available Delivery Methods

### Public Class

Public expert-led online training from the convenience of your home, office or anywhere with an internet connection. Guaranteed to run .

### **Private Class**

Private classes are delivered for groups at your offices or a location of your choice.

Microsoft Certified Partner

Webucator is a Microsoft Certified Partner for Learning Solutions (CPLS). This class uses official Microsoft courseware and will be delivered by a Microsoft Certified Trainer (MCT).

## **Course Outline**

- 1. Get Started with Microsoft Data Analytics
  - 1. Data Analytics and Microsoft
  - 2. Getting Started with Power BI
  - 3. Lab: Getting Started
    - 1. Getting Started
- 2. Prepare Data in Power BI
  - 1. Get data from various data sources
  - 2. Optimize performance
  - 3. Resolve data errors

- 4. Lab: Preparing Data in Power BI Desktop 1. Prepare Data
- 3. Clean, Transform, and Load Data in Power BI
  - 1. Data shaping
  - 2. Enhance the data structure
  - 3. Data Profiling
  - 4. Lab: Transforming and Loading Data
    - 1. Loading Data
- 4. Design a Data Model in Power BI
  - 1. Introduction to data modeling
  - 2. Working with tables
  - 3. Dimensions and Hierarchies
  - 4. Lab: Data Modeling in Power BI Desktop
    - 1. Create Model Relationships
    - 2. Configure Tables
    - 3. Review the model interface
    - 4. Create Quick Measures
  - 5. Lab: Advanced Data Modeling in Power BI Desktop
    - 1. Configure many-to-many relationships
    - 2. Enforce row-level security
- 5. Create Measures using DAX in Power BI
  - 1. Introduction to DAX
  - 2. DAX context
  - 3. Advanced DAX
  - 4. Lab: Introduction to DAX in Power BI Desktop
    - 1. Create calculated tables
    - 2. Create calculated columns
    - 3. Create measures
  - 5. Lab: Advanced DAX in Power BI Desktop
    - 1. Use the CALCULATE() function to manipulate filter context
    - 2. Use Time Intelligence functions
- 6. Optimize Model Performance
  - 1. Optimze the model for performance
  - 2. Optimize DirectQuery Models
  - 3. Create and manage Aggregations
- 7. Create Reports
  - 1. Design a report
  - 2. Enhance the report
  - 3. Lab: Designing a report in Power BI
    - 1. Create a live connection in Power BI Desktop
      - 2. Design a report
      - 3. Configure visual fields adn format properties
  - 4. Lab: Enhancing Power BI reports with interaction and formatting
    - 1. Create and configure Sync Slicers
    - 2. Create a drillthrough page
    - 3. Apply conditional formatting
    - 4. Create and use Bookmarks

- 8. Create Dashboards
  - 1. Create a Dashboard
  - 2. Real-time Dashboards
  - 3. Enhance a Dashboard
  - 4. Lab: Designing a report in Power BI Desktop Part 1
    - 1. Create a Dashboard
    - 2. Pin visuals to a Dashboard
    - 3. Configure a Dashboard tile alert
    - 4. Use Q&A to create a dashboard tile
- 9. Create Paginated Reports in Power BI
  - 1. Paginated report overview
  - 2. Create Paginated reports
  - 3. Lab: Creating a Paginated report
    - 1. Use Power BI Report Builder
    - 2. Design a multi-page report layout
    - 3. Define a data source
    - 4. Define a dataset
    - 5. Create a report parameter
    - 6. Export a report to PDF
- 10. Perform Advanced Analytics
  - 1. Advanced Analytics
  - 2. Data Insights through AI visuals
  - 3. Lab: Data Analysis in Power BI Desktop
    - 1. Create animated scatter charts
      - 2. Use teh visual to forecast values
      - 3. Work with Decomposition Tree visual
      - 4. Work with the Key Influencers visual
- 11. Create and Manage Workspaces
  - 1. Creating Workspaces
  - 2. Sharing and Managing Assets
  - 3. Lab: Publishing and Sharing Power BI Content
    - 1. Map security principals to dataset roles
      - 2. Share a dashboard
      - 3. Publish an App
- 12. Manage Datasets in Power BI
  - 1. Parameters
  - 2. Datasets
- 13. Row-level security
  - 1. Security in Power BI

# **Class Materials**

Each student will receive a comprehensive set of materials, including course notes and all the class examples.

Class Prerequisites

Experience in the following *is required* for this Microsoft Business Intelligence class:

- Understanding core data concepts.
- Knowledge of working with relational data in the cloud.
- Knowledge of working with non-relational data in the cloud.
- Knowledge of data analysis and visualization concepts.