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Learning Style: Virtual Classroom

Technology: Microsoft

Difficulty: Intermediate

Course Duration: 3 Days

Microsoft Power BI Data Analysis Professional

About This Course:

As technology progresses and becomes more interwoven with our businesses and lives, more data is collected about business and personal activities. This era of "big data" is a direct result of the popularity and growth of cloud computing, which provides an abundance of computational power and storage, allowing organizations

of all sorts to capture and store data. Leveraging that data effectively can provide timely insights and competitive advantages. Creating data-backed visualizations is key for data scientists, or any professional, to explore, analyze, and report insights and trends from data. Microsoft® Power BI® software is designed for this purpose. Power BI was built to connect to a wide range of data sources, and it enables users to quickly create visualizations of connected data to gain insights, show trends, and create reports. Power BI's data connection capabilities and visualization features go far beyond those that can be found in spreadsheets, enabling users to create compelling and interactive worksheets, dashboards, and stories that bring data to life and turn data into thoughtful action.

Course Objectives:

In this course, you will analyze data and create visualizations with Microsoft Power BI. After completing this course, students will be able to:

- Analyze data with self-service BI
- Connect to data sources
- Perform data cleaning, profiling, and shaping
- Visualize data with Power BI
- Enhance data analysis by adding and customizing visual elements
- Model data with calculations
- Customize and filter visualizations
- Use advanced analysis techniques
- Share reports and create dashboards in the Power BI Service
- Manage and collaborate in the Power BI Service
- Enhance reports and dashboards

Audience:

- This course is designed for professionals in a variety of job roles who are currently using desktop or web-based data management tools such as Microsoft® Excel® or SQL Server® reporting services to perform numerical or general data analysis. They are responsible for connecting to cloud-based data sources, as well as shaping and combining data for the purpose of analysis. They are also looking for alternative ways to analyze business data, visualize insights, and share those insights with peers across the enterprise. This includes capturing and reporting on data to peers, executives, and clients. This course is also designed for professionals who

want to pursue the Microsoft Power BI Data Analyst (Exam PL-300) certification.

Prerequisites:

To ensure your success, you should have experience managing data with a spreadsheet program such as Microsoft Excel. To meet this prerequisite, you can take any one or more of our following course

- Microsoft Excel for Office 365: Beginner
- Microsoft Excel for Office 365: Intermediate
- Microsoft Excel for Office 365: Advanced

Optionally, having experience with other data analytics tools, such as Google Analytics™ or Customer Relationship Management (CRM) systems such as Salesforce®, as well as a knowledge of database design concepts and basic programming constructs such as looping and branching, will help you get even more out of this course. The following course is helpful but not required:

- Microsoft Excel for Office 365/2021: Data Analysis with Power Pivot

Course Outline:

Lesson 1: Analyzing Data and Reporting with Power BI

- Data Analysis and Visualization for Business Intelligence
- Interact with Reports in Power BI

Lesson 2: Connecting to Data

- Create Data Source Connections
- Configure and Manage Relationships
- Save Files in Power BI
- Secure and Troubleshoot Connections

Lesson 3: Cleaning, Transforming, and Loading Data

- Load, Clean, and Shape Data with the Query Editor
- Profile Data with the Query Editor
- Shape Data with the Query Editor
- Transform Data with the Query Editor

Lesson 4: Visualizing Data with Power BI

- Create Visualizations with Power BI
- Select Visualization Types with Power BI

Lesson 5: Enhancing Visuals for Data Analysis

- Customize Visuals and Pages
- Incorporate Tooltips in Visualizations

Lesson 6: Modeling Data with Calculations

- Create Calculated Columns with DAX
- Create Calculated Measures and Conditional Columns

Lesson 7: Customizing and Filtering Reports

- Create Data Hierarchies
- Filter Reports
- Discover Time-Intelligence Insights
- Configure Slicers for Interactive Filtering

Lesson 8: Performing Advanced Analysis

- Create Calculated Tables, Variables, and Parameters
- Perform Statistical Analysis
- Analyze Data with Advanced Power BI Features

Lesson 9: Sharing Reports and Creating Dashboards in the Power BI Service

- Publish and Explore Reports in the Power BI Service
- Create Dashboards
- Add Q&A to Dashboards

Lesson 10: Managing and Collaborating in the Power BI Service

- Manage Workspaces and Share Content
- Collaborate with the Power BI Service

Lesson 11: Enhancing Reports and Dashboards

- Optimize Usability and Performance

- Create Mobile Reports for Power BI

Appendix A: Mapping Course Content to Microsoft® Power BI® Data Analyst (Exam PL-300) Certification Objectives