

Business Intelligence for IoT Solutions

Modality: On Demand

Duration: 12 Hours

About this Course:

This intermediate-level course is included in Microsoft Professional Program Certification and offers a comprehensive guide for learning data visualization techniques and elements of business intelligence. This course helps professionals nurture the skills needed to assist businesses to streamline processes and achieve progressive growth.

This course consists of several modules of the different aspects of data visualization and IoT Solution implementation and integration. This course covers the topics relating to Time Series Data Analysis, IoT Telemetry Data, Azure Time Series Insight, Data Transfer and IoT Visualization with Power BI, Real-Time IoT Data Streaming, Azure Stream Analytics, and many more. The main goal of this course is to help professionals achieve practical knowledge and conceptual understanding of data visualization creation and querying.

Course Objectives:

The core objective of this course is to help professionals gain a strong knowledge of the following key elements of IoT solutions:

- Importance of Power BI Data Visualization and Time Series Insight Tools
- Time Series Insights Configuration and Installation
- Building a set of Data Reference and Data Retention Configuration
- Heat Maps and Dashboard Development Skills
- Event and IoT Hub Integration with Time Series Insight
- Tracking Resources and Scaling Environment with the use of Templates
- Power BI Desktop Data Transformation
- Power BI Desktop Data Modeling and Development
- Power BI Desktop Data Visualization
- Using Power BI Services for Dashboard Development
- Organization Security, Packs, and Groups Configuration
- Adding Consumer Group in IoT Hub
- Design and Configuration of Power BI and IoT Hub Data Transfer with Stream Analytics
- Designing and Publishing Power BI Data Visualization Report

Audience:

This course is specifically designed for professionals striving for excellence in the niche of IoT and is best suited for the following group of professionals:

- IoT Developers and Experts
- IoT Engineers

- IT Professionals

Prerequisites:

Professionals planning to enroll in Business Intelligence for IoT Solutions course need to comply with the following set of prerequisites:

- Fundamental Knowledge of Modern Tools used for Software Development
- Practical Knowledge of Terminologies used in IoT and business goals
- Basic Understanding of Data Analysis Tools and Practices

Course Outline:

Time Series Data

- Introducing Time Series Insights
- Producing Simulated Data
- Provisioning Time Series Insights
- Analysis with Time Series Insights
- Module Assessments

Visualizing And Querying Data

- Setting up data generation
- Using Time Series Analysis patterns
- Using Advanced TSI Features
- Managing Time Series Insights
- Module Assessments

Power BI And IoT

- Introducing Power BI
- Transforming Data
- Modeling Data
- Visualizing Data
- Module Assessments

Streaming with Power BI

- Using Power BI with Streaming Data
- Configuring Power BI
- Real-time Visuals and Alerts
- Using Power BI in an IoT architecture
- Module Assessments

Final Evaluation

- Final Assessments

