

## Effective Data Visualization with Power BI

### Course Syllabus

#### 1. Description

The course was designed for anyone whose job involves analyzing and presenting data to decision-makers with Power BI. This course is primarily about learning how to present the data so that everyone can understand it and to make the tool serve this purpose.

#### 2. Target Audience

- Data/Business/Product Analysts
- BI Developers
- Project Managers
- Economists
- Product Managers
- Etc.

#### 3. Knowledge Required

Power BI – Basic/Medium Level

#### 4. Objectives

- Understand how visual perception works
- Be able to formulate a message and communicate it visually
- Be able to build effective visualizations using Power BI
- Be able to create effective dashboards

#### 5. Schedule

- 20 academic hours
- Recommended: 5 sessions of 4 academic hours each

## 6. Outline

### 1) **Visual Perception – Introduction**

- a) Visual Perception – A Brief Overview
- b) The Purpose of Data Visualization
- c) Thinking about the Message and Translating It into Visuals
- d) Practice (Blank Pages with Grids and Pens are Needed for Practicing)

### 2) **Design**

- a) Data Pixel Rules
- b) Colors
- c) Designing Graphs and Tables Correctly
- d) Correcting Examples of What Exists in the Organization Today (Must be Sent a Week in Advance)
- e) Using Power BI to Practice Applying the patches

### 3) **Dashboards – Part 1**

- a) Definitions and Types of Dashboards
- b) Dashboard Failure Reasons
- c) Analyzing Existing Use Cases and Dashboards
- d) Dashboard Characterization Process and User Guidance

### 4) **Dashboards – Part 2**

- a) Design Principles for Dashboards
- b) Dashboard Exercise Summary