# **Analytics Essentials**

## ANI\_204d | On-Demand | Automation and Insights | Expanded

Course Duration: 4 hours

In the age of Automation and AI, statistics are critical in developing automation capabilities or just understanding how AI works. This course provides an overview of statistics and analytics that are used within the telecom industry. Statistics principles are explored from a definition, functional and specific uses perspective. It starts with an introduction to Data Science Fundamentals. The course concludes with uses within the telecom industry.

#### **Intended Audience**

A high-level technical overview to personnel involved in product management, marketing, planning, design, engineering, and operating wireless (4G, 5G) and wireline access networks

#### **Objectives**

After completing this course, the student will be able to:

- Understand Descriptive Analysis
- Understand Predictive Analytics
- Understand Linear Regression
- Understand Logistic Regression
- Explore Usecases in telecom

### **Course Prerequisites**

Welcome to Al Welcome to Machine Learning

#### Outline

Big picture of Analytics
 Types of Analytics
 Landscape of Analytics

- 2. Descriptive Analytics
   2.1 Concepts of Descriptive Analytics
- 2.2 Demonstration Usecase
- 3. Predictive Analytics
- 3.1 Predictive Analytics a subset of AI Exercise: Review Questions
- 4. Getting Started with Data
  4.1 Data Types
  4.2 Measures of Central Tendency
  4.3 Measures of Dispersion
  4.4 Correlation
  4.5 Skew/Symmetry
  4.6 Kurtosis

5. Data Terminology in Predictive Analytics5.1 Understand input and output for ML/DL modelsExercise: Review Questions

6. Process of Predictive Analytics6.1 Understand each step of the ProcessExercise: Review Questions

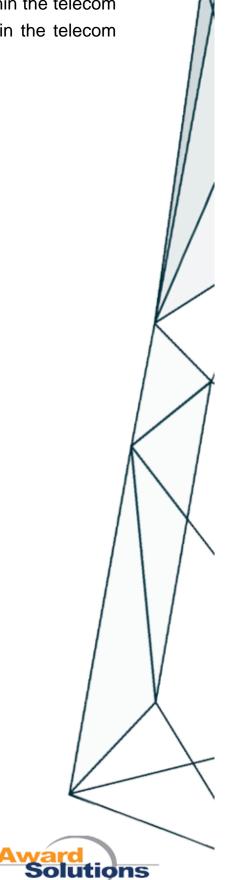
7. Visit Models

7.1 Taxonomy of Models Exercise: Review Questions

8. Linear Regression
 8.1 Understand How it works
 Exercise: Review Questions

9. Logistic Regression
 9.1 Understand How it works
 Exercise: Review Questions

10. Use Cases



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