

Associate Certified Analytics Professional aCAP





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#### Introduction:

This program is designed to prepare participants for the certification exam only.

This training program is designed to enhance participants' knowledge and skills in analytics. Through it, they will gain a deep understanding of analytical methods, tools, and best practices essential for effective data-driven decision-making.

# **Program Objectives:**

### By the end of this program, participants will be able to:

- Grasp the core concepts and principles of data analytics.
- Utilize various techniques to analyze data and generate insights.
- Create and validate data models to support decision-making.
- Effectively communicate findings and recommendations to stakeholders.
- · Gain the knowledge and skills necessary to pass the aCAP certification exam.

# **Targeted Audience:**

- Aspiring data analysts seeking certification.
- · Professionals transitioning into analytics roles.
- Managers looking to enhance their data-driven decision-making skills.
- IT professionals interested in analytics.

# **Program Outlines:**

#### Unit 1:

### Data Analytics Fundamentals:

- Overview of data analytics and its importance in business.
- Understanding different data types and sources.
- Techniques for collecting and sourcing data.



- Ensuring data quality and governance.
- Overview of commonly used analytical tools and software.

#### Unit 2:

#### Statistical and Quantitative Analysis:

- Understanding measures of central tendency, variability, and distribution.
- Conducting hypothesis testing and confidence interval estimation.
- Applying linear and logistic regression techniques.
- Analyzing time series data for trends and seasonality.
- Utilizing probability distributions and building predictive models.

#### Unit 3:

### Data Management and Preparation:

- Techniques for cleaning and preparing data for analysis.
- Methods for transforming and normalizing data.
- Combining data from different sources for comprehensive analysis.
- Techniques for exploring and visualizing data.
- Creating new features to improve model performance.

#### Unit 4:

## Advanced Analytical Techniques:

- Introduction to machine learning concepts and algorithms.
- Techniques for classification and regression tasks.
- Methods for clustering and association analysis.
- Basics of NLP and text analytics.
- Techniques for evaluating and validating models.

# Unit 5:



# **Communicating Analytical Results**

- Principles and best practices for effective data visualization.
- Hands-on practice with tools like Tableau, Power BI, or Python..
- Techniques for presenting data in a compelling narrative.
- · Creating insightful reports and dashboards.
- Best practices for presenting findings and recommendations to diverse audiences.
- Prepare for the certifiation exam.

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