

COMPUTATION MODELLING FOR BUSINESS INTELLIGENCE PROFESSIONALS DC-BIP

Duration: 7 days; Instructor-led | Virtual Instructor-led

OVERVIEW

This programme is created specifically for learners who wish to identify and utilise appropriate statistical algorithms and data models to test hypotheses and derive patterns or solutions.

OBJECTIVES

- Types of algorithms and advanced computational methods
- Range and application of various statistical algorithms
- Range and application of various types of data models
- Usage of analytics platforms and tools
- Statistical modelling techniques
- Coding languages for programming of algorithms and signals
- Potential reasons for unintended outcomes
- Identify appropriate statistical algorithms and data models to test hypotheses or theories
- Use appropriate analytics platforms and analytical tools given specific analytics and reporting requirements
- Utilise a range of statistical methods and analytic approaches to data
- Conduct statistical modelling of data to derive patterns and/or solutions
- Perform coding and configuration of software agents or programs based on a selected model or algorithm
- Conduct tests on the actions taken and outcomes to assess effectiveness of the model
- Diagnose unintended outcomes produced by analytical models
- Propose changes or updates to the model or algorithm applied
- Implement changes to the coding and configuration of software agents or programs
- Draw relevant trends and insights from data analysis to support decision

PREREQUISITES

- No prerequisites

AUDIENCE

- Individuals actively engaged in the field of data analytics.

COURSE CONTENTS

Module 1: Introduction To Computational Modelling For BI Professionals

- Introduction to advanced computational methods
- Discussion of analytic use cases

- Characteristics of statistical algorithm and data model requirements
- Assumptions and limitations of computational methods

Module 2: Technology Strategy

- Trends in analytic development and production platform
- Technology strategy for the development and operation of analytics

Module 3: Advanced Computational Modelling Development

- Introduction to Statistical Modelling
- Introduction to Machine Learning Modelling
- Introduction to Time Series Forecasting Modelling

Module 4: Advanced Computational Modelling Coding

- Data processing
- Data training and testing split
- Data sample balancing (optional)
- Model setting
- Model result report

Module 5: Potential Risks Of Analytics Models

- Unintended outcomes produced by analytical models and their potential reasons