

Course ID #: 0370-847-11.0-W

Hours: 14

Delivery Method: Group Internet Based

### **Course Content**

### **Course Description:**

In this course, you will cover an introductory to advanced knowledge of how to model metadata for predictable reporting and analysis results using IBM Cognos Cube Designer. Participants will learn the full scope of the metadata modeling process, from initial project creation, to publishing a dynamic cube, and enabling end users to easily author reports and analyze data.

### **Course Objectives:**

Upon successful completion of this course, students will:

- Create and design a Dynamic Cube
- Deploy and configure a Dynamic Cube
- Optimize performance with aggregates
- Model a virtual cube

## **Prerequisites:**

Knowledge of dimensional modeling and design.

Experience using the IBM Cognos Analytics portal and Administration.

## **Target Audience:**

Data Modelers.

# **Topics:**

# **Lesson 1: Introduction to IBM Cognos Dynamic Cubes**

- Define and differentiate Dynamic Cubes
- Dynamic Cubes characteristics
- Examine Dynamic Cube requirements
- Examine Dynamic Cube components
- Examine high level architecture
- IBM Cognos Dynamic Query
- Review Dimensional Data Structures
- Dynamic Cubes caching

### Lesson 2: Create and design a Dynamic Cube

- Explore the IBM Cognos Cube Designer
- Review the cube development process
- Examine the Automatic Cube Generation
- Manual development overview
- Create dimensions
- Model the cube
- Best practice for effective modeling



Course ID #: 0370-847-11.0-W

Hours: 14

Delivery Method: Group Internet Based

#### **Lesson 3: Deploy and configure a Dynamic Cube**

- Deploy a cube
- Explore the Estimate Hardware Requirements
- Identify cube management tasks
- Examine Query Service administration
- Explore Dynamic Cube properties
- Schedule cube actions
- Use the DCAdmin comment line tool

#### **Lesson 4: Advanced Dynamic Cube modeling**

- Examine advanced modeling concepts
- Explore modeling caveats
- Calculated measures and members
- Model Relative Time
- Explore the Current Period property
- Define period aggregation rules for measures

#### **Lesson 5: Advanced features of Cube Designer**

- Examine multilingual support
- Examine ragged hierarchies and padding members
- Define Parent-Child Dimensions
- Refresh Metadata
- Import Framework Manager packages
- Filter measures and dimensions

# Lesson 6: Optimize performance with aggregates

- Identify aggregates and aggregate tables
- In-memory aggregates
- Use Aggregate Advisor to identify aggregates
- User defined in-memory aggregates
- Optimize In-Memory Aggregates automatically
- Aggregate Advisor recommendations
- Monitor Dynamic Cube performance
- Model aggregates (automatically vs manually)
- Use Slicers to define aggregation partitions

#### **Lesson 7: Define Security**

- Overview of Dynamic Cube security
- Identify security filters
- The Security process Three steps
- Examine security scope
- Identify scope rules
- Identify roles
- Capabilities and access permissions
- Cube security deep dive

#### Lesson 8: Model a virtual cube

- Explore virtual cubes
- Create the virtual cube
- Explore virtual cube objects
- Examine virtual measures and calculated members
- Currency conversion using virtual cubes
- Security on virtual cubes



Course ID #: 0370-847-11.0-W

Hours: 14

Delivery Method: Group Internet Based

# **Lesson 9: Introduction to IBM Cognos Analytics** (Optional)

- Define IBM Cognos Analytics
- Redefined Business Intelligence
- Self-service
- Navigate to content in IBM Cognos Analytics
- Interact with the user interface
- Model data with IBM Cognos Analytics
- IBM Cognos Analytics components
- Create reports
- Perform self-service with analysis and Dashboards
- IBM Cognos Analytics architecture (high level)
- IBM Cognos Analytics security
- Package / data source relationship
- Create Data modules
- Upload files

Register for this class by visiting us at: <a href="https://www.tcworkshop.com">www.tcworkshop.com</a> or by calling us at 800-639-3535

NASBA CPE details are provided on the following pages.



Course ID #: 0370-847-11.0-W

Hours: 14

Delivery Method: Group Internet Based

## **NASBA Information**

**Level:** Intermediate

**Attendance Requirement:** To be awarded the full credit hours, you must sign in and attend the entire course.

Recommended Field(s) of Study: Computer Software & Applications

**Recommended CPEs:** 15.5 hours

#### Policies: Course Registration, Cancellation, Refund, and Complaint Resolution

For more information regarding administrative policies such as complaint and program cancellation policies, please contact our offices at 800-639-3535 or visit us at: <a href="https://www.tcworkshop.com">www.tcworkshop.com</a>

#### **Official National Registry Statement:**

The Computer Workshop is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have final authority on the acceptance of individual courses for CPE credits. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: <a href="https://www.nasbaregistry.org">www.nasbaregistry.org</a>

NOTE: Since our information is in multiple places on our website or in PDF format that is sent to clients, we have provided our normal course content with the NASBA Information added along with links to our policy page on the web. We will add our name to the Official National Registry Statement after we are approved.