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## **Delivering a Relational Data Warehouse**

Modality: Self-Paced Learning Duration: 24 Hours SATV Value: CLC: NATU: SUBSCRIPTION: Learn, Master

## About this course:

This course of computer science from Microsoft gives students the information and abilities needed to configuration, execute, and load a relational information warehouse. In this course of 4 weeks, you'll figure out how to dissect business prerequisites, index and partition the information for performance, plan measurement, and fact tables, and make ETL answers for ongoing loading of the warehouse.

This course is educated with short-structure demonstrations, lectures, and interviews with industry specialists. Tests and hands-on labs, using Azure SQL Database and Microsoft SQL Server 2016, will assist with reinforcing your insight, practice aptitudes, and tackle issues.

Note: To finish the hands-on components in this course, you will require an Azure membership and a Linux, Windows, or Mac OS X client computer. You can pursue a free Azure preliminary membership (a legitimate credit card is required for confirmation, yet you won't be charged for Azure services). Note that the free preliminary isn't accessible in all locations. It is conceivable to finish the course and gain credentials without completing the hands-on practices.

## **Course Objective:**

- Requirements of Map business reporting to logical data entities
- Partitioning and Indexing strategies to provide scale and performance.
- Design fact tables and dimension in a star schema.
- Load the data warehouse with the techniques of Transform, Extract, and Load (ETL).
- The Business Case for a Data Warehouse
- Planning for a Data Warehouse
- Exploring Data Warehouse Architectures
- Designing a Physical Database Architecture
- Improving Query Performance
- Improving Operational Performance

## **Prerequisites:**

- Awareness of database ideas and essential SQL query syntax.
- Awareness of business uses of databases, for example, dashboards and reports.
- A willingness to adapt effectively and continue on while troubleshooting specialized issues are

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fundamental

## **Course Outline:**

#### Module 1 - Introducing the Data Warehouse

- Lesson 1 The Business Case for a Data Warehouse
- Lesson 2 Planning for a Data Warehouse
- Lesson 3 Exploring Data Warehouse Architectures
- Module 1 Quiz

#### Module 2 - Designing a Relational Data Warehouse Schema

- Lesson 4 Designing Dimension Tables
- Lesson 5 Designing Fact Tables
- Lesson 6 Exploring Additional Schema Design Concepts
- Lab Designing a Relational Data Warehouse Schema
- Module 2 Quiz

#### Module 3 - Optimizing a Data Warehouse for Scale and Performance

- Lesson 7 Designing a Physical Database Architecture
- Lesson 8 Improving Query Performance
- Lesson 9 Improving Operational Performance
- Lab Optimizing a Data Warehouse for Scale and Performance
- Module 3 Quiz

#### Module 4 - Loading and Maintaining a Data Warehouse

- Lesson 10 Designing an Enterprise Information Management Strategy
- Lesson 11 Designing an Extract, Transform, and Load Process
- Lesson 12 Exploring Additional ETL Design Concepts
- Lab Loading and Maintaining a Data Warehouse
- Module 4 Quiz

### **Course Final Exam**

• Final Exam?