

Technology & Data Management

Length: 2 Days

Course Description: High-quality information is the key to successful management of businesses. Despite the large quantity of data that is collected by organizations, managers struggle to obtain information that helps them make decisions. While *operational processing* systems help capture, store, and manipulate data to support day-to-day operations of organizations, *reconciled systems* -- sometimes referred to as data warehouses or business intelligence (BI) systems -- support the analysis of data, thus, enabling decision making.

With the advent of big data systems, organizations have turned to enterprise data management frameworks to manage and gain insights from the vast amount of data collected. While storage costs themselves are relatively affordable, the bigger challenge has been finding an appropriate mechanism to manage the data as many technologies (e.g., relational databases, data warehouses) have limitations on the amount of data that can be stored.

This course focuses on realizing the business advantage and business potential of operational, reconciled, and big data systems as well as data assets in supporting enterprise data management strategies and enterprise data analytics.

COURSE CONTENT

- How to design relational databases that are used to manage operational systems
- How to query relational databases using Structured Query Language (SQL)
- How to design data warehouses and business intelligence systems
- Understand the principles of data profiling, data integration, and master data management
- Understand the basics of Hadoop, Hive and Pig
- Data Security
- Data Storage
- Replication & Clustering