



Data Management, Security, and
Warehousing Course



Data Management, Security, and Warehousing Course

Introduction:

This data management, security, and warehousing course is designed for professionals and companies that want to thrive by fully utilizing Big Data. As the Big Data phenomenon has emerged, companies are relying more and more on adequate Data Analytics and Data Science to properly plan, prepare, and react to business challenges, innovate how they conduct their business, and increase the level of service to their customers.

At the same time, they reduce costs and streamline their processes. This data management, security, and warehousing course has become so widespread that the term Industrial Revolution 4.0 has become a household name.

With Big Data comes the challenge of data management, as more than just having the data is required. Data Management is defined as an administrative process that includes acquiring, validating, storing, protecting, and processing required data to ensure its accessibility, reliability, and timeliness for users.

This data management, security, and warehousing course focuses on adequately warehousing data. In the era of big data, a wide variety of data warehousing and security solutions exist, and choosing the right approach is the most challenging decision companies must make.

Targeted Groups:

- Systems Analysts.
- Programmers.
- Data Analysts.
- Database Administrators.
- Project Leaders.
- Software Engineers.
- Managers.
- Any Professional involved in Data Analytics.

Course Objectives:

At the end of this data management, security, and warehousing course, the participants will be able to:

- Learn how to plan the steps in a data warehousing project.
- Acquire the knowledge to determine why there is an escalating need for strategic information.
- Get acquainted with the fundamental problem of data management and data warehousing.
- Learn the strategies for data security.
- Determine what methods and tactics you should use in the Big Data era.

Targeted Competencies:

At the end of this data management, security, and warehousing training, the participant's competencies will:

- Operational VS Decision Support Systems.
- Strategic Information from the Data Warehouse.
- Significance of Data Management in the Big Data Era.
- Data Security Strategies for Next-Generation Data Warehouses.
- Extract-Transform-Load ETL Process.

Understanding Data Management, Security, and Warehousing:

The data management, security, and warehousing course explores the intricate world of data warehousing management alongside data management practices. Participants gain insights into data warehousing and management strategies and learn to optimize data storage, retrieval, and security.

This comprehensive data management, security, and warehousing training covers key aspects such as data security management tools, defining data security management, and implementing robust data security measures.

Upon completion, individuals can earn a data management certificate, equipping them with essential skills for data management roles. Suppose you're seeking data manager training or interested in data management certification. In that case, this course offers invaluable knowledge and expertise in data management and warehousing.

Course Content:

Unit 1: Agile Enterprise Data Warehousing:

- Agile Manifesto.
- The Scrum Method.
- Extreme Programming Approach.
- Lean Software Development.
- Sources for Data Warehousing Standards.

Unit 2: Data Security Strategies:

- How do you determine if you can trust your data?
- ISO Standard ISO/IEC 17728.
- EU General Data Protection Regulation GDPR.
- Protecting the Data Warehouse.
- The Lifecycle of a Dataset.

Unit 3: Data Warehouse: The Building Blocks:

- Data Defining Features.
- Data Warehouses and Data Marts.
- Data Warehouse Components Overview.
- Dimensional Analysis of Data.
- Requirements as the Driving Force for Data Warehousing.



Unit 4: Data Warehouse: Architecture and Infrastructure Requirements for Data Warehousing:

- Hardware and Operating Systems.
- Database Software.
- Automation of Warehousing Tasks.
- Data Warehouse Architecture.
- Business Conceptual Model.
- Logical Data Model.
- Physical Data Model.

Unit 5: Data Management, Security, and Warehousing Implementation:

- Data Extraction, Transformation, and Loading.
- Data Design and Data Preparation-data Dimensional Modeling.
- Key Elements of Data Quality.
- Matching Information with the User.
- On-Line Analytical Processing OLAP.
- Big Data Processing in Cloud Environments.

Conclusion:

In the data management, security, and warehousing course, participants emerge equipped with a profound understanding of data warehousing management and data management principles.

This comprehensive data management, security, and warehousing program delves into the intricacies of data warehousing and management, covering essential topics like data security management definitions and tools.

Graduates of this data management, security, and warehousing skills course earn a valuable data management certificate, validating their data security and management expertise.

Whether seeking data manager training or pursuing data management certification, this course empowers individuals with practical skills to excel in data management roles, ensuring they can effectively navigate the complexities of modern data ecosystems while prioritizing data security.