

€ TRAINING

Data Security and Warehousing





Data Security and Warehousing

Introduction:

This training program offers comprehensive instruction in managing, securing, and storing data effectively. Through it, participants will be equipped with the skills necessary to safeguard data assets, optimize storage systems, and mitigate risks associated with data management.

Program Objectives

At the end of this program, participants will be able to:

- Organize the steps of a data warehousing project effectively.
- Gain insight into the factors driving the increasing demand for strategic information.
- Understand the fundamental issues in data management and data warehousing.
- Acquire knowledge of data security techniques.
- Make informed decisions regarding the selection of techniques and strategies in the Big Data era.

Targeted Audience

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

Program Outline:

Unit 1:

Data Security Techniques:

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

Unit 2:

Data Warehouse: Architecture and Infrastructure Requirements for Data Warehousing:

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

Unit 3:

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.

Unit 4:

Agile Enterprise Data Warehousing:

- Agile Manifesto.
- The Scrum Method.
- Extreme Programming Approach.
- Lean Software Development.

- Sources for Data Warehousing Standards.

Unit 5:

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.