

# Information Storage and Management v4

**Duration: 5 Days** Course Code: ISMV3

#### Overview:

Information Storage and Management (ISM) is a unique course that provides a comprehensive understanding of the various storage infrastructure components in data center environments. It enables participants to make informed decisions on storage-related technologies in an increasingly complex IT environment, which is fast changing with the adoption of software-defined infrastructure management and third platform technologies (cloud, Big Data, social, and mobile technologies). It provides a strong understanding of storage technologies and prepares participants for advanced concepts, technologies, and processes. Participants will learn the architectures, features, and benefits of intelligent storage systems including block-based, file-based, object-based, and unified storage; software-defined storage; storage networking technologies such as FC SAN, IP SAN, and FCoE SAN; business continuity solutions such as backup and replication; the highly-critical area of information security; and storage infrastructure management. This course takes an open-approach to describe all the concepts and technologies, which are further illustrated and reinforced with EMC-related product examples.

## **Target Audience:**

Experienced IT professionals, who may not have had exposure to all of the segments of modern storage infrastructure ? Experienced IT professionals managing storage infrastructure and services Študents and professionals who are looking to pursue a career in the storage industryOrganization-wide IT teams directly or indirectly responsible for planning, designing, deploying, managing, or leveraging information infrastructureIndividuals who are seeking EMC Proven Professional Information Storage Associate (EMCISA) certification

### Objectives:

- Upon successful completion of this course, participants will be
- Describe data center infrastructure and its elements
- Describe third platform technologies cloud, big data, social, and
- Evaluate various types of intelligent storage systems and their deployment
- Describe software-defined storage

- Evaluate various storage networking technologies and their deployment
- Articulate business continuity and archiving solutions
- Describe various security threats and controls in a storage infrastructure
- Describe key processes for managing a storage infrastructure

#### Prerequisites:

- To understand the content and successfully complete this course, a participant must have a basic understanding of computer architecture, operating systems, networking, and databases
- Participants with experience in specific segments of storage infrastructure would also be able to assimilate the course material

#### Content:

Module 1: Introduction to Information Storage

- Digital data and its types
- Information storage
- Key characteristics of data center
- Driving digital transformation

Module 2: Modern Technologies Driving Digital Transformation

- Cloud computing and its essential characteristics
- Cloud services and cloud deployment models
- Big data analytics
- Internet of Things and mobile computing
- Machine learning and artificial intelligence

Module 3: Modern Data Center Environment

- Compute, storage, and networking
- Application services
- Software-defined data center
- Modern data center infrastructure architecture

Module 4: Intelligent Storage Systems

- Components of an intelligent storage system
- RAID
- Types of intelligent storage systems
- Scale-up and scale-out storage architecture

Module 5: Block-based Storage System

- Components of block-based storage system
- Storage provisioning and storage tiering

Module 6: Fibre Channel SAN

- FC SAN Overview
- FC architecture
- FC topology and zoning
- SAN Virtualization

Module 7: IP and FCoE SAN

- Overview of TCP/IP
- IP SAN overview
- iSCSI
- FCIP
- FCoE

Module 8: File-based and Object-based Storage System

- NAS components and architecture
- File-level virtualization and tiering
- Object-based and unified storage

Module 9: Software-Defined Storage and Networking

- Software-defined storage
- Software-defined networking

Module 10: Introduction to Business Continuity

- Business continuity overview
- Fault tolerance IT Infrastructure

Module 11: Data Protection Solutions

- Replication
- Backup and recovery
- Data deduplication
- Data archiving
- Migration

Module 12: Storage Infrastructure Security

- Introduction to Information Security
- Storage security domains and threats
- Key security controls

Module 13: Storage Infrastructure Management

Introduction to storage infrastructure management

Operations management

## **Further Information:**

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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