Iverson Associates Sdn Bhd (303330-M)
Suite T113 – T114, 3rd Floor, Centrepoint, Lebuh Bandar Utama
Bandar Utama, 47800 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-7726 2678   Fax: 03-7727 9737   Website: www.iverson.com.my

Course Outline :: Information Storage and Management Version 5::

Module Title   :   **Information Storage and Management Version 5**

Duration   :   **5 days**

Overview

This unique course provides a comprehensive mastery of the various storage infrastructure components and options in a modern data center environment. Participants will learn to apply storage-related technologies in a fast changing and complex IT environment due to the adoption of new technologies such as cloud, edge computing, Big Data, IoT, AI/ML, and 5G.

This course covers intelligent storage systems, networking technologies business continuity solutions, information security, and storage infrastructure management. The course content takes an open-approach to describe all the concepts and technologies, which are further illustrated and reinforced with Dell product examples.

The training prepares the learner for the Dell Technologies Proven Professional Information and Storage and Management Version 5.0 associate-level certification exam (DEA-1TT5).

Audience

- Experienced IT professionals directly managing storage infrastructure
- IT professionals seeking to better understand the role of storage infrastructure in the modern data center
- Students and professionals considering a career in the storage industry
- Organization-wide IT teams responsible for planning, designing, deploying, managing, or leveraging storage infrastructure
- Individuals who are seeking Dell Technologies Proven Professional Information Storage and Management associate-level certification

Prerequisite Knowledge/Skills

To successfully complete this course, a student should have:

- A basic understanding of computer architecture, operating systems, and networking
- Participants with experience in specific segments of storage infrastructure would also be able to assimilate the course material

Course Objectives

Upon successful completion of this course, participants should be able to:

- Describe business drivers of digital transformation.
- Describe modern data center infrastructure and its elements.

Iverson Associates Sdn Bhd (303330-M)
Suite T113 – T114, 3rd Floor, Centrepoint, Lebuh Bandar Utama
Bandar Utama, 47800 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-7726 2678   Fax: 03-7727 9737   Website: www.iverson.com.my

Course Outline :: Information Storage and Management Version 5::

- Explain intelligent storage systems and their types.
- Evaluate various storage networking technologies and approaches.
- Describe software-defined storage and networking.
- Articulate business continuity and data protection solutions (replication, backup, migration, and archiving).
- Describe storage infrastructure security and management processes.

Course Outline

The content of this course is designed to support the course objectives.

• Introduction to Information Storage
- Data and information
- Key characteristics of a data center
- Business drivers of digital transformation

• Business Drivers of Digital Transformation
- Cloud Computing
- Big Data and AI/ML
- IoT, Edge Computing, and 5G

• Modern Data Center Environment
- Types of compute system, hypervisor, VM, and containers
- Applications, types of storage and network
- Software-defined Data Center
- Modern Data Center Architecture, CI/HCI

• Intelligent Storage Systems
- Types and components of intelligent storage systems
- RAID
- Storage provisioning and tiering

• Block, File, and Object-based Storage System
- Block storage system components
- Scale-up and Scale-out NAS
- Features and components of Object storage system
- Unified storage system

Iverson Associates Sdn Bhd (303330-M)
Suite T113 – T114, 3rd Floor, Centrepoint, Lebuh Bandar Utama
Bandar Utama, 47800 Petaling Jaya, Selangor Darul Ehsan
Tel: 03-7726 2678   Fax: 03-7727 9737   Website: www.iverson.com.my

Course Outline :: Information Storage and Management Version 5::

- **Storage Area Network – FC SAN**
━ FC SAN Architecture

━ FC topologies and zoning

━ SAN virtualization

- **IP SAN, FCoE, and NVMe-oF**
━ iSCSI components, protocol stack, and VLAN

━ FCIP connectivity, protocol stack, and FCoE

━ NVMe-oF

- **Software Defined Storage and Network**
━ Key attributes of SDS, SDS architecture

━ SDN architecture, benefits

- **Business Continuity**
━ Business continuity overview

━ Fault tolerant IT infrastructure

- **Data Protection**
━ Data replication

━ Backup and recovery

━ Data deduplication

━ Data archiving and migration

- **Storage Infrastructure Security**
━ Introduction to information security

━ Storage security domains and threats

━ Key security controls

- **Storage Infrastructure Management**
━ Introduction to storage management

━ Operations management