BACKUP RECOVERY SYSTEMS AND ARCHITECTURE (BRSA)

COURSE OVERVIEW

The Backup Recovery Systems and Architecture (BRSA) course provides participants with a solid foundation in Backup and Recovery infrastructure. The course focuses on the concepts and technologies used in Backup and Recovery environments. Participants will learn about backup and recovery theory, including backup methods, planning, and key terminology. The course includes topics on how storage technologies work and how their features such as replication and snapshots can be used for backup. This is followed by a look into data sources at the backup client and storage node backup targets. The course ends with backup and recovery planning and a high level look at the EMC Backup and Recovery product portfolio.

BACKUP RECOVERY SYSTEMS AND ARCHITECTURE COURSE CONSISTS OF 5 MODULES:

Module 1: Backup Theory
This module provides an introduction to backup and recovery, including the reasons for performing backups, definition of common backup and recovery terms, and a look at the flow of data in typical client/server backup and restore operations.

Module 2: Information Storage Concepts
This module introduces disk architecture and storage systems including storage area networks (SAN) and network attached storage (NAS). The module concludes with a discussion of storage system features that are used in backup and recovery operations.

Module 3: Backup Client
This module focuses on the various sources of backup data including file system data and several types of databases, including Oracle, Microsoft SQL, and Exchange.

Module 4: Backup Storage Node
This module looks at backup and recovery from the perspective of the storage node, including the various protocols used when writing data and the advantages and disadvantages of the various types of backup storage media.

Module 5: Backup and Recovery Planning
This module examines the various factors to be considered in backup and recovery planning. The module concludes with a high level look at the EMC Backup and Recovery product portfolio. Students are given the opportunity to use the concepts they have learned in the course to develop a proposed solution that addresses the backup and recovery concerns of a sample company's backup and recovery concerns.

EMC² PROVEN PROFESSIONAL

Faculty profile for success

Faculty who have been teaching courses on the following topics will have an added advantage in successfully teaching the course:

1. Computer architecture and storage systems
2. Networking, including SAN, NAS, and TCP/IP
3. Protecting data in disk storage, including RAID and replication methods and technologies
4. Backup and recovery concepts
5. Virtualization concepts

Student profile for success

Students who have completed courses on the following topics will have an added advantage in comprehending the content of the course:

1. Computer systems and architectures
2. Networking technologies
3. Operating systems
4. Information storage and management
5. Backup and recovery concepts

The knowledge you gain through the Backup Recovery System and Architecture 'open' course can be applied to impact business decisions in a variety of ways

Key activities	Business Impact
1 Describe the importance and benefits of backups and describe key backup and recovery terminology.	Motivate business stakeholders and IT teams alike. Needs and benefits of backups must be clear and consistent to those involved in backup and recovery.
2 Define key backup and recovery terminology.	Establish a common view of backup and recovery that enables various IT functional teams to share a common reference.
3 Describe backup and recovery operations.	Provide a framework for describing the common components and processes of all backup applications.
4 Identify and differentiate various types of storage systems.	Provide a common background in the concepts and components of storage technologies that will be encountered in a backup environment.
5 Identify SAN and NAS concepts and components.	Provide an overview of networking environments that will be encountered in a backup environment.
6 Describe storage system features used in backup and recovery.	Examine how technologies such as replication and snapshots can be used from a backup perspective.
7 Identify major sources of backup data.	Be able to recognize the key features of various sources of data that will be encountered in a backup environment, including file system and database data.
8 Describe the different types of backup storage media, their advantages and disadvantages.	Provide a foundation and considerations for examining the strengths and weaknesses of various backup media and technologies used by backup products.
9 Examine the steps involved in planning for backup and recovery.	Provide a common foundation in planning for backup and recovery that will be built upon in the Specialist-level backup and recovery curriculum.
10 Describe the EMC portfolio of backup products.	Provide an introduction to the various EMC backup products; essential to those who will be involved in designing backup environments.

EMC²®