Day - 1	Day - 2

Welcome and Course Overview
- Introduction to the course, objectives, and certification details.
- Overview of HashiCorp Vault and its importance in modern IT environments.

Understanding Vault Architecture
- Key components (storage backends, audit devices, authentication methods).
- Vault workflows and use cases.

Installation and Configuration
- Installing Vault in various environments (local, cloud, containers).
- Configuring storage backends and basic operational setup.

Vault Initialization and Unsealing
- Vault initialization process.
- Unsealing Vault and key management techniques.

Authentication Methods (Part 1)
- Overview of authentication methods.
- Configuring AppRole, Userpass, and Token authentication.

Hands-on Lab: Installing and Configuring Vault
- Practical setup of Vault, including initializing, unsealing, and configuring authentication methods.

Secret Engines (Part 1)
- Introduction to secret engines.
- Managing static secrets (KV Secrets engine).

Dynamic Secrets
- Overview of dynamic secrets.
- Configuring dynamic secrets for databases and cloud providers.

Hands-on Lab: Static and Dynamic Secret Management
- Practice in configuring static and dynamic secrets.

Access Control Policies (ACL)
- Introduction to Vault policies (ACLs).
- Creating, applying, and testing policies to control access.

Authentication Methods (Part 2)
- Configuring OAuth, LDAP, and Kubernetes authentication methods.
- Practical examples of integrating Vault with authentication backends.

Hands-on Lab: Configuring Authentication Methods and ACL Policies
- Practical lab focused on integrating authentication methods and designing policies.

Advanced Vault Features
- Introduction to advanced features like Vault namespaces, replication, and performance standby nodes.

Data Encryption with Vault
- Overview of Vault's encryption-as-a-service.
- Configuring Vault for encryption, transit secrets engine.

Monitoring and Auditing
- Best practices for monitoring Vault (metrics, logs).
- Enabling audit devices for tracking operations.

Troubleshooting and Best Practices
- Common issues in Vault operations and troubleshooting steps.
- Best practices for Vault deployment in production environments.

Hands-on Lab: Advanced Vault Operations
- Practice using advanced features, encryption, and troubleshooting Vault.

Wrap-up and Q&A
- Final discussions, clarifications, and resources for further learning.