

## [Module 1: Course Introduction](#)

- Review course goals
- Review course objectives

## [Module 2: Introduction to VMware Integrated OpenStack](#)

- Describe what OpenStack is
- Describe the services that make up OpenStack
- Describe what VMware Integrated OpenStack is
- Describe what NFV is and how VMware Integrated OpenStack fits in
- Understand the licensing model of VMware Integrated OpenStack
- Understand the features of VMware Integrated OpenStack

## [Module 3: VMware Integrated OpenStack Deployment](#)

- Understand the roles of OpenStack Management Server and Ansible
- List the deployment models
- Prerequisites for installing VMware Integrated OpenStack
- Perform a VMware Integrated OpenStack highavailability deployment
- Patch and upgrade a VMware Integrated OpenStack environment

## [Module 4: VMware Integrated OpenStack Architecture](#)

- List the VMs deployed after a VMware Integrated OpenStack high-availability installation
- Understand the overall architecture of a VMware Integrated OpenStack high-availability setup
- List the VMware Integrated OpenStack services running within each VM
- Understand the role of each VMware Integrated OpenStack service
- Understand SSL certificates in VMware Integrated OpenStack

## [Module 5: Keystone Authentication](#)

- Understand Keystone use cases and services
- List the features offered by Keystone
- How to integrate Keystone with LDAP
- Configuration files, log files, and database tables related to keystone

## [Module 6: Glance Images](#)

- Understand Glance use cases and services
- List the features offered by Glance
- Create flavors and images
- List the configuration files, log files, and database tables related to Glance

## [Module 7: Networking with Neutron](#)

- Understand Neutron use cases and services
- Integrate Neutron with VMware vSphere® Distributed Switch™
- Integrate Neutron with NSX for vSphere
- Integrate Neutron with NSX-T
- List the configuration files, log files, and database tables related to Neutron

#### [Module 8: Managing Instances with Nova](#)

- Understand Nova use cases and services
- Understand availability zones and host aggregates
- Understand the concept of tenant VDCs
- Deploy and manage instances using Nova
- Resize an instance and view its console logs
- Configuration and log files related to Nova services

#### [Module 9: Cinder Block Storage](#)

- Understand Cinder use cases and services
- List the features of Cinder
- Add a persistent volume to an instance
- Snapshot and backup Cinder volume
- List the configuration files, log files, and database tables related to Cinder

#### [Module 10: Monitoring with Ceilometer](#)

- List the Telemetry use cases and services
- Enable Ceilometer in VMware Integrated OpenStack
- Monitor instances using Ceilometer
- Configuration and log files related to Ceilometer service

#### [Module 11: Automating with Heat](#)

- Define Heat use cases and services
- Build a Heat orchestration template
- Deploy resources using a Heat orchestration template

#### [Module 12: Kubernetes Integration](#)

- Introduction to Docker and Kubernetes
- Deploy VMware Integrated OpenStack with Kubernetes
- Manage containers using Kubernetes

#### [Module 13: Troubleshooting Concepts](#)

- Common issues in VMware Integrated OpenStack
- Tools used to troubleshoot VMware Integrated OpenStack

## Module 14: Advanced Features

- LBaaS and its use cases
- FWaaS and its use cases
- DNSaaS and its use cases
- Auto-scaling using Heat
- Using hardware passthrough