

[Module 1: Course Introduction](#)

- Introductions and course logistics
- Course objectives
- References and resources

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

- Describe what an OpenStack is
- Describe the services that make up VMware Integrated OpenStack
- Describe what VMware Integrated OpenStack is
- Describe what is NFV and how does VIO fit in
- Understand the licensing model of VIO
- Understand the use cases of VMware Integrated OpenStack

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

- Understand the role of Kubernetes in the VIO control plane
- List the VMware Integrated OpenStack deployment models
- How to perform VIO high-availability deployment
- How to perform VIO compact installation
- Pre-requisites for installing VMware Integrated OpenStack
- How to use the HTML5 web UI / VIOCLI to check the deployment configurations and deployment running status
- Explain steps involved in patching VIO high availability setup

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

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

[Module 5: Keystone Authentication](#)

- Understand keystone use cases and services
- List the features offered by keystone in VIO
- How to integrate keystone with LDAP
- List the configuration, view logs, and database tables related to keystone

[Module 6: Glance Images](#)

- Understand Glance use case and its services
- List the features offered by Glance in VIO
- Explain how to create flavors and images

- Describe how to set up metadata, for example SPBM storage policy
- List the custom resources/logs and database tables related to Glance

[Module 7: Networking with Neutron](#)

- Understand the Neutron use case and its services
- Integrate Neutron with NSX-T Data Center
- List the custom resources, logs, and database tables related to Neutron

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

- Understand Nova use cases and services
- Understand regions, availability zones, and host aggregates
- Understand the concept of tenant VDC
- Nova support for multiple vCenter instances
- How to deploy an instance using Nova
- How to resize an instance and view the console logs
- Configuration and logs related to Nova service

[Module 9: Cinder Block Storage](#)

- Understand Cinder use cases and services
- List the features offered by Cinder
- Adding a persistent volume to an instance
- Explain the Snapshot of a Cinder volume and attach it to another instance
- List the custom resources, log files, and database tables related to Cinder

[Module 10: Monitoring with Ceilometer](#)

- List the Telemetry use cases and services
- How to enable Ceilometer in VIO
- How to monitor the VIO environment using Ceilometer
- Configuration and log files related to Ceilometer service

[Module 11: Automating with Heat](#)

- Define Heat use cases, templates, and services
- Describe use cases of Heat

[Module 12: Troubleshooting Concepts](#)

- List common issues in VMware Integrated OpenStack
- Use troubleshooting tools
- Describe simple troubleshooting procedures
- List and explain Day-2 operations

[Module 13: Advanced Features](#)

- Describe Load Balancer as a Service (Octavia)
- Explain Firewall as a Service
- Describe Designate (DNS as a Service)
- Describe automating scaling
- Describe selective vCPU pinning
- Explain SRIOV network redundancy support
- Describe network trunk services support
- Describe Live resize
- Describe hardware passthrough (GPU pass through)
- Describe external REST API