

uCertify

Course Outline

Virtualization Essentials



04 Aug 2025

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Videos and How To

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Here's what you get

Features

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1. Course Objective

The Virtualization Essentials course is designed for IT professionals with specialization in a particular discipline such as server administration, networking, or storage and who are looking for an introduction into virtualization or cloud computing as a way to grow in the organization. The Virtualization course is a package of interactive lessons, TestPrep, and assessments that provide an understanding of topics such as virtual machines, managing CPUs, storage, and memory of a virtual machine.

2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

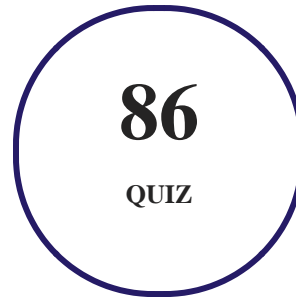
3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.



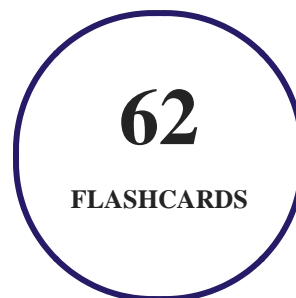
4. Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



5. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform

2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

Chapter 2: Understanding Virtualization

- Describing Virtualization

- Understanding the Importance of Virtualization
- Understanding Virtualization Software Operation

Chapter 3: Understanding Hypervisors

- Describing a Hypervisor
- Understanding the Role of a Hypervisor
- Comparing Today's Hypervisors

Chapter 4: Understanding Virtual Machines

- Describing a Virtual Machine
- Understanding How a Virtual Machine Works
- Working with Virtual Machines

Chapter 5: Creating a Virtual Machine

- Performing P2V Conversions
- Loading Your Environment
- Building a New Virtual Machine

Chapter 6: Installing Windows on a Virtual Machine

- Loading Windows into a Virtual Machine
- Understanding Configuration Options
- Optimizing a New Virtual Machine

Chapter 7: Installing Linux on a Virtual Machine

- Loading Linux into a Virtual Machine
- Understanding Configuration Options
- Optimizing a New Linux Virtual Machine

Chapter 8: Managing CPUs for a Virtual Machine

- Understanding CPU Virtualization
- Configuring VM CPU Options
- Tuning Practices for VM CPUs

Chapter 9: Managing Memory for a Virtual Machine

- Understanding Memory Virtualization
- Configuring VM Memory Options
- Tuning Practices for VM Memory

Chapter 10: Managing Storage for a Virtual Machine

- Understanding Storage Virtualization
- Configuring VM Storage Options
- Tuning Practices for VM Storage

Chapter 11: Managing Networking for a Virtual Machine

- Understanding Network Virtualization
- Configuring VM Network Options
- Tuning Practices for Virtual Networks

Chapter 12: Copying a Virtual Machine

- Cloning a Virtual Machine
- Working with Templates
- Saving a Virtual Machine State

Chapter 13: Managing Additional Devices in Virtual Machines

- Using Virtual Machine Tools
- Understanding Virtual Devices
- Configuring a CD/DVD Drive
- Configuring a Floppy Disk Drive

- Configuring a Sound Card
- Configuring USB Devices
- Configuring Graphic Displays
- Configuring Other Devices

Chapter 14: Understanding Availability

- Increasing Availability
- Protecting a Virtual Machine
- Protecting Multiple Virtual Machines
- Protecting Data Centers

Chapter 15: Understanding Applications in a Virtual Machine

- Examining Virtual Infrastructure Performance Capabilities
- Deploying Applications in a Virtual Environment
- Understanding Virtual Appliances and vApps
- Open Stack and Containers

12. Practice Test

Here's what you get

50

PRE-ASSESSMENTS QUESTIONS

50

POST-ASSESSMENTS QUESTIONS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

13. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

You can't stay away! Get