

40 HORAS

OVERVIEW

This expert-level course provides technical professionals the knowledge and skills necessary to plan and design for robust cloud services in a cloud and IT as a Service environment. Building on the skills acquired in the Cloud Infrastructure Planning and Design specialist-level course, it focuses on governance, organizational, financial, and technology aspects as well as the management and operation of cloud services. Through lecture, discussions, case studies, design examples, and a series of interactive labs, students learn to design solutions which transform business operations and cloud environments to support a cloud services model. The course is applicable to enterprise, service provider, and existing data center operations considering cloud and cloud services. This course uses an “open” approach focusing on core concepts, principals, and technologies rather than specific products. To provide context, the course includes EMC-specific examples and case studies.

AUDIENCE

This course is intended for those responsible for the design, development, and implementation of a cloud strategy and cloud services within their organization and includes architects, designers, consultants, IT and operations managers, service management teams, cloud administrators, as well as line of business (LOB) technical managers.

PREREQUISITE KNOWLEDGE/SKILLS

To understand the content and successfully complete this course, a student should have knowledge and skills associated with the following:

- Five or more years of design experience in compute, network, and storage, including the design of virtualized infrastructures in support of key cloud attributes.
- Understanding of cloud delivery and service models, as well as the services lifecycle.
- Strongly recommended prerequisites include: EMC Information Storage and Management (EMCISA), EMC Cloud Infrastructure and Services (EMCCIS).

COURSE OBJECTIVES

Upon successful completion of this course, participants should be able to:

- Explain ITaaS concepts and benefits as well as various elements helping drive institutions to an ITaaS delivery model.
- Define, assess, and plan for cloud services from the perspective of Governance, Finance, Organization, and Technology (GFOT).
 - Summarize the planning and design strategies for cloud services and describe the significance of the service catalog, templates, service level agreements, orchestration,

provisioning, and automation when building and deploying cloud services.

COURSE OUTLINE

Module 1: Understanding IT Transformation and Cloud Services

- Review common IT challenges that often exist even after a cloud adoption has occurred and explain what it means for IT to provide business value.
- List benefits of several common industry IT transformation models.
- Identify the ITaaS model plus the business, cultural, and technical reasons why organizations are adopting ITaaS or a similar model for standing up cloud services.
- Define cloud services and describe how ITaaS supports them in the context of governance, finance, organization, and technology.
- Identify general planning and design steps.

Module 2: Technology Planning for Cloud Services

- Identify innovative practices, tools, and technologies such as DevOps, Microservices, and open source that influence the creation of cloud native applications and cloud services.
- Describe considerations and analysis of workloads and assess application profiles.
- Identify various back-end technology processes and tools that might be helpful for delivering cloud services.
- List orchestration and automation characteristics as critical features for delivering cloud services. Recognize the importance and benefits of measuring and reporting.
- Define the central role of a service catalog for delivering cloud services.

Module 3: Governance Planning for Cloud Services

- Define the various types of governance and their relevance to cloud services.
- Summarize important considerations for the three components of GRC: governance, risk management, and compliance.
- Specify various considerations related to security and trust for cloud services.

Module 4: Financial Planning for Cloud Services

- Identify the financial considerations for IT and its support of services for an
- ITaaS transformation.
- Explain service funding and define chargeback functions and models.
- List economic drivers for IaaS, PaaS, and SaaS service models as well as service costing and pricing.

Module 5: Organizational Planning for Cloud Services

- Describe the challenges facing organizations that need to deliver cloud services.
- Discuss the organizational considerations when transitioning to cloud services within an ITaaS model.
- Identify new roles, skills, and required competencies.

Module 6: Services Creation and Management

- Outline general and tactical strategies for offering cloud services as well as general considerations for service design.
- Describe service deployment steps, considerations, and models.
- Explain the significance of the service catalog, templates, service level agreements, orchestration, provisioning, and automation when building and deploying services.
- Summarize the importance of collecting measurements for service operations and management.

Module 7: Cloud Services Trends and Futures

- Discuss emerging trends impacting businesses.
- Describe how business is being digitized more than ever before.
- Explain how cloud services are driving business value and achieving positive outcomes.

Module 8: Planning and Design Review

- Develop a cloud services design and present this to the audience.
- Demonstrate how the cloud services design meets the business requirements and constraints that were identified during the assessment process.