GAQM®

Global Association for Quality Management

Certified Cloud Computing Professional (CCCP)™

Course Outline

What Modules are covered?

Module 1 – Introduction to Cloud Computing

1) Basic Concepts and Overview of Cloud Computing
2) Five Characteristics of Cloud
3) IT Utility
4) Examples of Cloud
5) Deployment Models
6) Private Cloud and Data Center
7) Public Cloud
8) Community Cloud
9) Hybrid Cloud
10) Types of Cloud Services (SaaS, Paas, Iaas)

Module 2 – Evolution towards Cloud

1) Mini Computers
2) Local Area Networks (LAN)
3) Networks and Servers
4) Virtualization
5) Types of Virtualization
6) Types of Virtualization in Private Cloud
7) Full vs Paravirtualization
8) Managed Services in the Cloud
9) Managed Services

Module 3 – History of Cloud

1) Technologies (Grid Computing,Utility Computing,Cluster Computing, Virtualization
2) Cloud Evolution
3) Examples of Cloud Providers (Bigdata, Azure, Salesforce etc.
4) Cloud enabling technologies
5) Virtualization with a Host Operating System
6) Tired Architecture
7) Multi-tenancy Architecture
8) Service-Oriented Architecture
9) Service-Oriented Architecture and Cloud
10) Service-Oriented Architecture Criteria
11) Benefits and Limitations of Cloud Computing

Module 4 – Implementing and Managing Cloud Computing

1) Building a local cloud environment
2) Principles of managed cloud services
3) Why to own a cloud environment?
4) Main components and their interconnection
5) Architectural considerations
6) Virtual Private Network Access
7) Risk Factors
8) Data Protection and Partitioning
9) ITSM Principles in Cloud Environment
10) IT Governance
11) Managing Service Levels in Cloud Environment

Module 5 – Using the Cloud

1) Overview of Accessing the Cloud
2) Accessing Web Applications through a Browser
3) Cloud Web Access Architecture
4) The Internet
5) OSI Model
6) Standard Protocols
7) Web Applications
8) Overview of Mobile Devices in Accessing the Cloud
9) Mobile Web Enabled Devices
10) How Cloud Computing can support Business Process?
11) Role of Standard Applications
12) Impact of Cloud Computing in Primary Business
13) Content Management System
14) Service Providers using the Cloud
15) Benifits and Risks of Providing Cloud based Services

Module 6 – Security and Compliance

1) Overview of Security and Compliance
2) Security Risks in the Cloud
3) Measures Mitigating Security Risks
4) The CIA Security Objectives
5) Maintaining Cloud Computing Availability Issues
6) Mitigating Data Loss and Risks
7) Cloud Computing and Perimeter Security
8) Overview of Mobile Devices in Accessing the Cloud
9) Security Layers in the Cloud
10) Viruses and Mal-ware in Cloud Computing
11) Best Practices to Prevent Mal-ware
12) Overview of Managing Identity and Privacy
13) Authentication, PII

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