

#### Description

- Cloud computing infrastructure have become a mainstay of the IT industry, opening the possibility for on-demand, highly elastic and infinite compute power with scalability and supporting the delivery of mission-critical secure enterprise applications and services.
- This course provides the ground-up coverage on the high-level concepts of cloud landscape, architectural principles, techniques, design patterns and real-world best practices applied to Cloud service providers and consumers and delivering secure Cloud based services.



#### Description

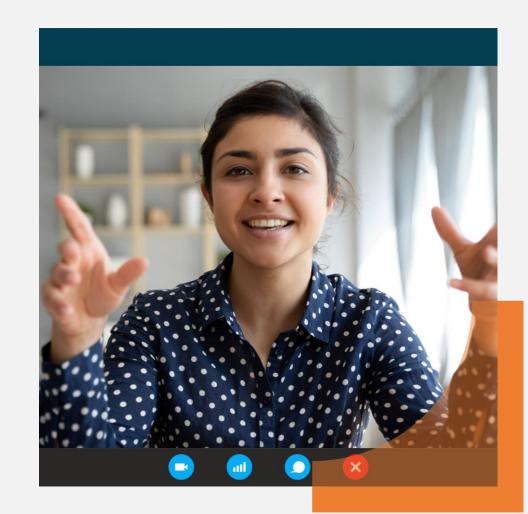
- The course will describe the Cloud security architecture and explore the guiding security design principles, design patterns, industry standards, applied technologies and addressing regulatory compliance requirements critical to design, implement, deliver and manage secure cloud-based services.
- As addition, student will be given the IT fundamental, to know the basic components, including the cloud infrastructure, to build and manage the enterprise information system.





## **Expected Outcome**

- Student will learn the IT Fundamentals and Enterprise information system as the basic knowledge.
- Student should develop the fundamental understanding of cloud computing architectures based on current standards, protocols, and best practices intended for delivering Cloud based enterprise IT services and business applications.
- Identify the known threats, risks, vulnerabilities and privacy issues associated with Cloud based IT services.





## **Expected Outcome**

- Approaches to designing cloud services that meets essential Cloud infrastructure characteristics – on-demand computing, shared resources, elasticity and measuring usage.
- Design security architectures that assures secure isolation of physical and logical infrastructures including compute, network and storage, data protection at all layers, end-to-end identity and access management, monitoring and auditing processes and compliance with industry and regulatory mandates.
- Understand the industry security standards, regulatory mandates, audit policies and compliance requirements for Cloud based infrastructures.





- IT Fundamentals
- Enterprise information system
- Cloud Concept and Architecture
- Cloud Computing
- Cloud Security
- Cloud Infrastructure Components
- Securing Data Centre
- Cloud Infrastructure Risk and Countermeasure
- Cloud Security Control
- Cloud Data Storage and Architecture
- Data Classification
- Data Retention





# Method of learning

- Theoretical learning material (4-5 sets)
- Video material (3 hours)
- Quiz (4x)
- Assignment (1x)



### Evaluation mechanism

- Student will be evaluated based on average of:
  - Quiz (4x)
  - Assignment
- Each Quiz should be completed with the minimum score of 60. If fail, student may repeat until successful score.
- The maximum period to accomplish the preinternship training is 4 (four) weeks

