

ICT335 Cloud Computing: Business Case and Technical Models

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY SEMESTER

Synopsis:

ICT335, Cloud Computing: Business Case and Technical Models, is meant to provide an overview of the field of Cloud Computing and provide a framework for selecting the optimal combination of cloud technology to meet business requirements. Students will learn the essential characteristics of Cloud Computing, examine why cloud computing is changing IT services across the Internet, and explain how Cloud Computing's flexibility can lower costs, increase service to deliver a new business model for both users and providers of Internet-based services. The framework includes business model drivers, technical theory, and comparison to historical alternatives. In addition, students will build a working technical knowledge of Cloud Computing, including use of virtualization software.

Topics:

- The emergence and evolution of Cloud Computing
- Financial advantages of Cloud Computing
- Green IT advantages of Cloud Computing
- Impact of Cloud Computing in various Industries/Sectors
- Roles in the new Cloud Computing Eco-System
- Technical and business models of Cloud Computing: IaaS, PaaS and SaaS
- Service-Oriented Architecture as a step toward Cloud Computing
- Basic approach to a data center-based SOA
- Implementation of Cloud Computing using Open Source software
- Install and operate Sun Linux-based VirtualBox

Textbooks:

Kris A Jamsa: Cloud computing : SaaS, PaaS, IaaS, Virtualization, Business Models, Mobile, Security and More 2013 Jones & Bartlett Learning
ISBN-13: 9781449647391

Learning Outcome:

- Describe the history and evolution of Cloud Computing
- Explain the core elements of a true cloud
- Apply business economics to evaluate a cloud provider
- Differentiate & distinguish the different types of clouds
- Analyze Service-Oriented Architecture in reference to cloud
- Demonstrate Desktop Virtualization
- Recommend IaaS, PaaS, and SaaS technologies
- Formulate calculation for practicing cloud economics

Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	QUIZ 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
Overall Examinable Components	Written Exam	70
Total		100