Subject Planner

Subject code and title: CCF501-Cloud Computing Fundamentals
Subject length: 12 weeks

Subject Description:

This subject provides a fundamental understanding of Cloud Computing. Students will be able to understand how the cloud computing infrastructure has evolved from the traditional IT infrastructure and what business advantages it brings. In addition, they will also learn the different Cloud Segments and Cloud Deployment models and the key players in the market. The subject also provides knowledge of Cloud Services and Cloud Security.

Subject Learning Outcomes (SLO):

SLO a)	Describe the essential computing elements in cloud services to enable industry automations.
SLO b)	Distinguish the use of cloud services from traditional IT infrastructure in digital transformation.
SLO c)	Identify key cloud services' offerings for recommendation to client enterprises.
SLO d)	Implement cloud services via major cloud providers to support stakeholder requirements.
SLO e)	Appraise IT governance requirements to safeguard cloud-driven industry solutions.

Delivery Schedule:

	Module	Learning Activities	Assessment Progression & Due Date	SLOs addressed
1	Traditional Computing Practices and their evaluation in the context of Modern Computing Requirements. How does it fit for modern computing requirements?	Discussion Forum: • Introduce yourself • Break the ice • Thinking Exercise on Total Cost of Ownership	Familiarise yourself with assessment briefs associated with this subject	b)
2	Essentials of Cloud Computing and Characteristics	Discussion Forum: • Race to Fill In the Five Essentials of Cloud • State of Cloud Adoption in Australia and New Zealand • Key Cloud Computing Services Offered by the Cloud Service Provider		a)
3	Cloud Computing Deployment Models	Discussion forum • Deployment Model Case Study • Case Study: Optimising Cloud Costs		a)
4	Cloud Computing Service Models	Discussion Forum: • Your Favourite SaaS Application • Thinking Exercise: No Crowd, No Cloud	**Assessment 1 Due**	a)
5	Major Public Cloud Providers and their comparison	Discussion Forum: • Letter to the editor • Free advice from the 'cloud expert'		c)
6	Advanced cloud models and concepts	Hands on lab – Azure Collaborative Activity - XaaS		c), d)
7	Public, Private and Hybrid Deployment Models, key considerations	Discussion forum – Analysing a cloud strategy Hands on lab – AWS		c), d)
8	Deployment case studies	Discussion forum – When deployment goes wrong Hands on lab – Google BigQuery	**Assessment 2 Due**	c), d)

9	Governance / Legal obligations of Cloud Providers and Consumers	Discussion forum: • Legal considerations of moving to Cloud • Cyber Law		c), d)
10	Security Threats while in cloud - Mitigation and Identification	Discussion forum – Security as a Service	Cloud Security Short Course	e)
11	Security Policy – Planning and management	Interactive knowledge check		e)
12	Implementation of Security Policy at various providers	Discussion forum – What is important?	**Assessment 3 Due**	e)

Time Management:

Below outlines the minimum time management expectations for students.

12 Week Delivery:

- 10 Hours per module (one week): Facilitated study: 3 hours / week. Personal Study: 7 hours / week.
- 3 hours facilitated study consists of attending class, responding to facilitator feedback.
- Students are to allocate 7 hours of personal learning. This includes essential time spent on pre-reading and viewing materials, assessment progression and learning activities.

Learning Activities:

There are learning activities in each module with the types of activities listed in the delivery schedule above. These activities are an essential component of the subject and they are designed to prepare you for your graded assessment tasks. These learning activities will help you to build your understanding and skills whilst also collaborating with your peers.

***Detailed information of each activity can be found in their corresponding Module page in Blackboard.**