

BIS3005 Cloud Computing

Unit Description

Cloud computing is a critical component of modern business operations. It has transformed the way networking, data storage and processing, application development and infrastructure provisioning is accomplished. This unit introduces cloud concepts, core cloud services, architecture and cloud support. This unit also introduces various database options to examine the various services available to access databases on the cloud. It also provides an understanding of virtualisation concepts and exposure to different virtualisation solutions and security challenges related to the cloud. This unit also introduces cloud automation which refers to the use of software-based solutions and tools to perform a process or procedure like creating, cloning, or shutting down a VM instance or a server cluster with minimal human intervention. It also introduces resources and capacity monitoring and respond to problems to optimise both performance and cost efficiency.

Credit Points	6 credit points
Duration	12 weeks (10 teaching weeks and 2 revision and assessment weeks)

Unit Learning Outcomes

On successful completion of this unit, students will be able to:

1. Investigate contemporary cloud architectures, management mechanisms and delivery modes.
2. Appraise recent technology innovations that enable effective cloud computing such as virtualisation.
3. Critically review current issues, challenges, and emerging trends in cloud computing.
4. Discuss the security issues and challenges in cloud computing that arise from the transformation of local computing to remote computing.
5. Formulate and communicate cloud computing solutions to enable specific business objectives.