Detailed Syllabus of Bachelor of Science in Cloud Computing (Level 6) Faculty of Computer Science

# Ballsbridge University

#### **UNIT-I**

- 1 Introduction to Cloud Computing, Cloud computing deployment and Service delivery models
- 1.1 PaaS, SaaS & IaaS
- 1.2 Introduction to Virtualization Technology
- 1.3 Server Virtualization, Storage Virtualization, Desktop Virtualization & Network Virtualization
- 1.4 Study on open source Virtualization Software such as HyperV,VMware, EUCALYPTUS & Xen
- 1.5 Assignments, case studies

## **UNIT-II**

- 2 Cloud Databases
- 2.1 Type of NoSQL, Key-Value, Column Family, Document & Graph NoSQL
- 2.2 Study on Cassandra, MongoDB, Neo4J or any open source NoSQL databases
- 2.3 Application Development in Cloud
- 2.4 Assignments, case studies

#### UNIT -III

- 3 Introduction to Bigdata
- 3.1 Bigdata Analytics tools & Technology
- 3.2 Assignments, case studies

# **UNIT-V**

- 4 Cloud Security & Management
- 4.1 SLA
- 4.2 Assignments, Case studies

### **REFERENCES**

- 1. Prospects of Cloud Computing in Education and e-Governance: An Analytical Study, Ganesh Chandra Deka, LAP LAMBERT Academic Publishing (2012)
- 2. Cloud Computing: A Practical Approach, LAP LAMBERT Academic Publishing (2012)
- 3. Handbook of Research on Cloud Infrastructures for Big Data Analytics, Pethuru Raj (IBM India Pvt. Ltd, India) and Ganesh Chandra Deka
- 4. Recent research publications in the reputed Journals/ Conference
- 5. Websites of the leading Cloud Service providers