

**INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE**  
Executive Post Graduate Programme in Management  
Course Outline

Course Title	Cloud Computing for Business
Instructor(s)	Prof M P Sebastian
Course credit	2
Total No. of Sessions	18
Session Duration	60 minutes
Term	
Year	2013-14

### 1. Introduction

Enterprise computing integrates all functions and departments of an organization onto a single computing system. Cloud computing promises to revolutionize IT and business by making computing available as a utility over the Internet. Most cloud computing infrastructure consists of reliable services delivered through data centers and built on servers. Clouds often appear as single points of access for all consumers' computing needs. Enterprise cloud computing is very strategic as there are lot of opportunities and challenges associated with it. This course intends the participant to lead a cloud migration process.

### 2. Objectives and scope

The objective of this course is to introduce the theory and practice of cloud computing, and to examine the business and managerial challenges involved in it.

- Basics of cloud computing
- What cloud computing has to offer?
- User organization of cloud computing
- Business opportunities with cloud
- Inside the cloud competitors
- The saga of an open architecture
- Business impact of cloud computing.
- Case studies in cloud computing.
- Leading a cloud migration process

### 3 (a) Text Book (Main)

1. James Broberg, Andrzej Goscinski, Rajkumar Buyya (2011). *Cloud Computing: Principles and Paradigms*, Wiley India Pvt Ltd, New Delhi. (BGB)

#### References:

1. Barrie Sosinsky (2011). *Cloud Computing Bible*, Wiley India Pvt Ltd, New Delhi.
2. Kris Jamsa (2012). *Cloud Computing*, Jones & Bartlett Learning, Burlington, MA, USA.
3. The Open Group (2011). *Cloud Computing for Business*, Van Haren, UK.
4. Charles Babcock (2010). *Management Strategies for the Cloud Revolution*, McGraw-Hill, New York.
5. Michael Miller (2008). *Cloud Computing*, Pearson Education, New Delhi.  
Relevant case materials/ current literature

### 4. Evaluation Scheme

Components	Weightage (%)
Quiz (3)	15%
Case discussion	15%
Project	20%
End Term Exam	50%

**Evaluation Components:****1. Project (20%)**

The project (group of 5 members, total 12 groups) involves in the feasibility study for cloud migration for a company based on the learning from this course.

The project is expected to identify the merits, limitations and risks of the existing information management/ERP system and analyze whether migration to cloud computing would meet the current and future challenges for the company (the topic to be finalized latest by 25th October, 2013).

The project requires an interim report (deadline: 30<sup>th</sup> October 2013 in softcopy) and a final report. 9<sup>th</sup> November 2013 is the deadline for submitting the final report (in hard copy & softcopy - about 15-20 pages, ppts are not accepted as project reports).

**2. Case Presentation (15%)**

The given ERP case study is to be presented by every group (same group as above) for duration of 20 minutes (10 minutes for presenting the case facts and 10 minutes for discussion). Each case discussion is expected to give a true learning experience. The presentation slides need to be submitted 24 Hrs, in advance. Three presentations each are scheduled on 26<sup>th</sup> Oct, 31<sup>st</sup> Oct, 2<sup>nd</sup> Nov, 7<sup>th</sup> Nov, and 9<sup>th</sup> November.

**3. Quizzes (15%)**

3 online quizzes (10 minutes duration) will be arranged to test student's sharpness of understanding the subject (on 31<sup>st</sup> Oct, 7<sup>th</sup> Nov, and 9<sup>th</sup> Nov).

**5. SESSION PLAN**

Session No.	Topics	Readings	Cases/ Papers
1,2,3 (24 <sup>th</sup> Oct)	Introduction to cloud computing, Cloud Service Models, Value of Cloud Computing and ROI	BGB pages 3-42, 459-487	-
4, 5,6 (26 <sup>th</sup> Oct)	Enterprise Clouds, Cloud Architecture	BGB pages 97-118, 123-154	Cloud computing as an innovation (Group 1), Cloud computing-the business perspective (Group 2), Cost effectiveness of commercial computing clouds (Group3)
7, 8, 9 (31 <sup>st</sup> Oct)	IaaS/ PaaS/ SaaS, Quiz I	BGB pages 157-187, 57-95	Democratizing IT (Group 4), Entrepreneurial and ethical adoption behaviour of cloud (Group 5), A Case Study of Migrating an Enterprise IT System to IaaS (Group 6)
10, 11, 12 (2 <sup>nd</sup> Nov)	Abstraction and Virtualization, Capacity planning, Data storage and legal issues	BGB pages 123-154, 221-246, 593-612	Resource allocation heuristics for efficient management of data centers (Group 7), A tenant-based resource allocation model for scaling SaaS (Group 8), Cloud computing in the European banking sector (Group 9)
13, 14, 15 (7 <sup>th</sup> Nov)	Securing the cloud Collaboration in the cloud, Migration to the cloud, Quiz II	BGB pages 573-591, 43-55	Improving K-12 pedagogy (Group 10), Knowledge management in the age of cloud computing (Group 11); Impact of elasticity on the profit of cloud computing providers (Group 12)
16, 17, 18 (9 <sup>th</sup> Nov)	Managing the cloud, Cloud change management, Quiz III	BGB pages 615-635, 551-572	Risk: a case study of Swiss companies (Group 13), Privacy and security issues in cloud computing: The role of institutions and institutional evolution (Group 14), Organizational culture and cloud computing: coping with a disruptive innovation (Group 15).