



Jindal Global Business School

Course Outline

Course Title	Cloud Foundation (AWS) (Industry Elective)
Core or Elective	Elective
Program and Batch	MBA-2, IBM-4
Semester & Academic Year	Spring 2026
Credits	1.5
Discipline/Area	IS & Analytics
Name of the Faculty Member/Course Instructor	Prof. Ritanjali Panigrahi
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Faculty Member's Open Office Day/s & Time	TBD

Introduction to the Course

Cloud computing is the availability of computing services without direct active management by the user. In general, data storage services and computing services are provided to the users on-demand. This course is intended to make students understand an overview of the cloud computing concepts, independent of specific technical roles. The course also discussed in detail the cloud concepts, Amazon Web Services' (AWS) core services, security, architecture, pricing, and support. During the course, there will be hands-on sessions with AWS as a tool for better understanding the cloud concepts.

Course Learning Objectives

At the end of the course, students should be able to

1. CLO1 – Define the AWS cloud
2. CLO2 – Explain the AWS pricing philosophy
3. CLO3 – Identify the global infrastructure components of AWS
4. CLO4 – Describe the security and compliance measures of the AWS cloud

Programme Competency Goals

MBA Programme Competency Goals (PCGs)		MBA Programme Learning Objectives (PLOs)
		Students will be able to
1	Technological Agility: Ability to adopt relevant technologies for better business decision making.	1. Understand relevant business technologies 2. Understand future technologies in business domain
2	Responsible Global Citizenship: Ability to understand the interplay between local and global issues and to act with sensitivity towards ethical and social issues	3. Understand the interplay between local and global business issues 4. Demonstrate sensitivity towards ethical issues 5. Demonstrate sensitivity towards social issues 6. Address societal issues
3	Effective communication: Ability to effectively exchange ideas and information	7. Present their ideas with clarity 8. Prepare an organized and logical business document 9. Use technology for effective communication
4	Critical Thinking: Ability to identify, analyse business problems and propose effective solutions	10. Identify main issues of business problems 11. Examine information from different sources 12. Draw inferences from analysis 13. Evaluate alternatives 14. Summarize and conclude
5	Leadership: Ability to take initiative, inspire and collaborate with others	15. Take initiative 16. Contribute effectively in groups

PLO-PCG Assessments Mapping Matrix

Program Learning Objectives (PLOs)	Program Competency Goals (PCGs)	Course Assessment Item
This course helps you to develop the following Program Learning Outcomes:	This course helps you to develop the following Program Competency Goals:	This learning outcome will be assessed in the following items
PLO 1, PLO 2, PLO 7, PLO 10, PLO 12, PLO 13, PLO 14	PCG 1, PCG 3, PCG 4	A1
PLO 1, PLO 2, PLO 10, PLO 12, PLO 13, PLO 14	PCG 1, PCG 4	A2, A3
PLO 1, PLO 2, PLO 8, PLO 10, PLO 12, PLO 13, PLO 14	PCG 1, PCG 3, PCG 4	A4
PLO 1, PLO 2, PLO 7, PLO 10, PLO 12, PLO 13, PLO 14, PLO 16	PCG 1, PCG 3, PCG 4, PCG 5	A5

Evaluation Schema

The course grade will be determined based on:

Assessment Task	Weightage (Percentage)	Nature (Individual/Group)	Week of Assessment	PLOs to be Assessed
A1: Class Participation	10%	Individual	Continuous	PLO 1, PLO 2, PLO 7, PLO 10, PLO 12, PLO 13, PLO 14
A2: Knowledge checks on AWS platform	20%	Individual	Continuous	PLO 1, PLO 2, PLO 10, PLO 12, PLO 13, PLO 14
A3: Quiz (UMS Based)	20%	Individual	5 th and 10 th Session	PLO 1, PLO 2, PLO 10, PLO 12, PLO 13, PLO 14
A4: Assignment	20%	Individual	12 th Session	PLO 1, PLO 2, PLO 8, PLO 10, PLO 12, PLO 13, PLO 14
A5: End Term Project Presentation	30%	Group	13 th Session	PLO 1, PLO 2, PLO 7, PLO 10, PLO 12, PLO 13, PLO 14, PLO 16

Description of Assessments:

A1- Students will have to take part in the discussion happening within the class.

A2- Students will have to complete all the quizzes and the labs at end of each module on the AWS platform.

A3- Students will attempt 2 quizzes (10% each) on UMS based on topics covered in class.

A4- Students will have to finish the assignment on providing a feasible solution for implementing cloud computing and submit it on UMS.

A5- Students will be distributed into different groups. They will be asked to present a probable AWS subscription model for a specific business problem for a specific industry. They will have to put themselves in the shoes of a cloud consultancy firm and will try to solve the business problem they will be given for the specific industry in the form of a PowerPoint presentation. They will be assessed in the light of the following rubrics:

Criteria	(35-40) – Outstanding	(30-35) – Proficient	(25-30) – Basic	25 (or lower) - Below Expectations
Adherence to the concepts discussed in class	The concepts are well represented and are clear, clean, concise, and captivating.	Concepts are apparent; opportunity exists for further enhancement.	Multiple aspects of the concepts are missing	Significant or complete disregard for the concepts discussed in class

Criteria	(35-40) – Outstanding	(30-35) – Proficient	(25-30) – Basic	25 (or lower) - Below Expectations
Sufficiency of real-life examples and linkage with the matter	There are sufficient real-life examples supporting the arguments presented and are properly linked to the matter discussed in the assignment	Sufficient real-life examples are presented but there is room for improvement in the subject of linkage with the matter discussed	Sufficient real-life examples are presented but there is no linkage with the matter discussed	No real-life examples cited and no linkage with the matter is discussed
Overall effectiveness of communication and presentation	The presentation is delivered in a convincing way that demonstrates confidence, competency, and thoroughness.	Delivery provides a strong argument and is well supported; minor details should be vetted and affirmed.	The presentation leaves concerns or lingering lack of clarity. Work required to review and confirm.	The presentation results in confusion and low level of confidence in understanding, requiring a significant or complete re-do.

The entire assignment will be evaluated out of 30 for the entire group based on their presentation performance on the day of their presentation. The marks obtained by each group will be the marks obtained by the individual members in the group.

Teaching Method

The course will have a judicious mix of lectures, class discussions, demonstrations, and activities.

Textbook / Other Readings

Textbook:

Reference Book: Thomas Erl, Cloud Computing: Concepts, Technology & Architecture. Pearson

Session Plan

Session Details	Topics	PLOs Covered
Session 1	Introduction to Cloud Computing	PLOs 1 & 2
Objective of the session	Understand the basics of cloud computing and its advantages	
Subtopics to be covered	Fundamentals of cloud computing and its advantages	
Readings	Module 1: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 2	Brief History of Cloud Computing	PLOs 1 & 2
Objective of the session	Understand the history and how cloud computing has evolved over the years	
Subtopics to be covered	History of Cloud Computing and AWS	

Readings	Module 1: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 3	AWS Global Infrastructure	PLOs 1, 2, 7 & 10
Objective of the session	Understand the different AWS tools and in which services they offer	
Subtopics to be covered	AWS tools and their services	
Readings	Module 2: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 4	Cloud Security	PLOs 1, 2, 7, 10, 12, 13 & 14
Objective of the session	Understand the requirements of network security and hence cloud security	
Subtopics to be covered	Network Security and Cloud Security	
Readings	Module 4: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 5	Cloud Security and AWS	PLOs 1, 2, 7, 10, 12, 13 & 14
Objective of the session	Understanding cloud security with Amazon IAM	
Subtopics to be covered	Amazon IAM	
Readings	Module 4: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture and Demo	
Session 6	Computing Services	PLOs 1, 2, 7, 10, 12, 13 & 14
Objective of the session	Understanding the basics of computing services	
Subtopics to be covered	Fundamentals of Computing Services	
Readings	Module 5: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 7	Computing Services on AWS	PLOs 1, 2, 7, 10, 12, 13 & 14
Objective of the session	Analyzing different computing tools from AWS	
Subtopics to be covered	Amazon EC2, AWS Lambda, AWS Beanstalk	
Readings	Module 5: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture, Demo, and Use Cases	
Session 8	Guest Lecture Speaker: Mr. Navneet Kumar Singh, PineLabs	PLOs 1, 2, 7, 10, 12, 13 & 14
Objective of the session	Insights on AWS Cloud: What the Future Holds	

Subtopics to be covered	Industry application of AWS cloud	
Readings	NA	
Case Title & Number	NA	
Pedagogy	Use cases	
Session 9	Cloud Storage	
Objective of the session	Understanding the concept of storage in cloud	
Subtopics to be covered	Fundamentals of Cloud Storage	
Readings	Module 6: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture-based	
Session 10	Cloud Storage and AWS	
Objective of the session	Analyzing different storage tools in AWS	
Subtopics to be covered	AWS EBS, AWS S3, AWS EFS, AWS S3 Glacier	
Readings	Module 6: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture, Demo, and Use Cases	
Session 11	Database Management Systems and AWS	
Objective of the session	Understanding the fundamentals of DBMS and Relational DBMS Analyzing different DBMS tools on AWS	
Subtopics to be covered	DBMS and RDBMS Amazon RDS, Amazon DynamoDB, Amazon Redshift, Amazon Aurora	
Readings	Module 7: AWS platform	
Case Title & Number	NA	
Pedagogy	Lecture, Demo, and Use Cases	
Session 12	Assignment	
Objective of the session	Submission of assignment in class	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	
Session 13	End Term Project Presentation	
Objective of the session	Presentation of Cloud Computing project presentation	
Subtopics to be covered	Group project presentation	
Readings	NA	
Case Title & Number	NA	
Pedagogy	Group Presentation	

Session 14	Reading and Revision Week	PLOs 1, 2, 10, 12, 13 & 14
Objective of the session	Course revision and doubt clearing	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	
Session 15	Reading and Revision Week	PLOs 1, 2, 10, 12, 13 & 14
Objective of the session	Course revision and doubt clearing	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	

Disability Support

JGU endeavours to make all its courses accessible to students. The Disability Support Committee (DSC) has identified conditions that could hinder a student's overall wellbeing. These include physical and mobility-related difficulties, visual impairment, hearing impairment, mental health conditions, and intellectual/learning difficulties, e.g., dyslexia and dyscalculia. Students with any known disability needing academic and other support are required to register with the Disability Support Committee (DSC) by following the procedure specified at <https://jgu.edu.in/disability-support-committee/>

Students who need support may register any time during the semester up until a month before the end semester exam begins. Those students who wish to continue receiving support from the previous semester, must re-register within the first month of a semester. Last-minute registrations and support might not be possible as sufficient time is required to make the arrangements for support.

The DSC maintains strict confidentiality about the identity of the student and the nature of their disability and the same is requested from faculty members and staff as well. The DSC takes a strong stance against in-class and out-of-class references made about a student's disability without their consent and disrespectful comments referring to a student's disability.

All general queries are to be addressed to disabilitysupportcommittee@jgu.edu.in

*Disclaimer: This session outline including assessments, sessions and/or readings may be revised during the semester if such need arises.