

**303105153 - Global Certifications - Fundamentals (Azure, AWS, GCP)**

<b>Course</b>	Bachelor of Technology (BTech)	<b>Semester - 2</b>
<b>Type of Course</b>	-	
<b>Prerequisite</b>	Basic understanding of computer concepts and basic programming.	
<b>Course Objective</b>	This course provides a broad introduction to Azure cloud, infrastructure, services, security and compliance, also billing, pricing and support plans.	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				External Marks	Internal Marks	External Marks	Internal Marks	
2	-	-	2.00	60	20	-	-	100

SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Course Content		T - Teaching Hours   W - Weightage	
Sr.	Topics	T	W
1	<b>Cloud Concepts:</b>  Understanding cloud computing principles, such as the different types of cloud models (public, private, hybrid), infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS), and software-as-a-service (SaaS).	4	15
2	<b>Azure Services:</b>  Familiarity with the various Azure services and their common use cases. This includes services like Azure Virtual Machines, Azure App Services, Azure Storage, Azure Functions, Azure SQL Database, and more.	6	20
3	<b>Security, Privacy, Compliance, and Trust:</b>  Knowledge of Azure security features, identity and access management, Azure Active Directory, data protection, compliance frameworks, and Azure governance methodologies.	6	25
4	<b>Azure Pricing and Support:</b>  Understanding Azure subscription options, cost management, pricing models, and the different support options available to Azure customers	4	15
5	<b>Azure SLA and Service Lifecycles:</b>  Familiarity with Azure Service Level Agreements (SLAs) and the Azure service lifecycle, including planned maintenance, updates, and deprecation policies.	10	25
Total		30	100

**\*Continuous Evaluation:**

*It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.*

**Reference Books:**

1. *"Microsoft Azure Fundamentals: Understanding Azure" by Michael Collier and Robin Shahan - 3rd Edition*
2. *"Azure for Architects: Implementing cloud design, DevOps, containers, IoT, and serverless solutions on your public cloud" by Ritesh Modi - 2nd Edition.*
3. *"Exam Ref AZ-900 Microsoft Azure Fundamentals" by Jim Cheshire - 2nd Edition*

**Course Outcome:**

*After learning the course the students shall be able to:*

1. *Understand the principles Cloud computing.*
- 2 *Familiarity with the various Azure services*
3. *Understanding the Azure security features,*
4. *Understanding Azure Service Level Agreements (SLAs) and the Azure service lifecycle*