

SWARNANDHRA

COLLEGE OF ENGINEERING & TECHNOLOGY

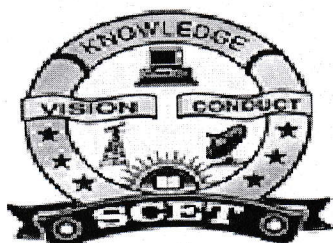
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Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY

TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester		
16IT7T03	CLOUD COMPUTING	VII	IT	6	2021-2022	04-10-2021		
COURSE OUTCOMES								
1	Explain basics of cloud computing technology							
2	Demonstrate the concept of virtualization and the development of Cloud Computing							
3	Analyze various cloud services and service providers							
4	Explain and Uses cloud scalability, security and disaster management							
5	Analyze Aneka Cloud Application Platform							
6	Explain the different cloud platforms and its application							
UNIT	Out Comes / Bloom's Level	Topics No.	Topics/ Activity	Text Book/ Reference	Conta ct Hour	Delivery Method		
I	CO- 1	1.1	Introduction to Cloud	T2	1	Chalk & Board		
		1.2	Cloud Computing at a Glance	T2	1			
		1.3	The Vision of Cloud Computing	T2	1			
				1.4	Defining a Cloud	T2	1	Power point presentations
				1.5	A Closer Look	T2	1	
				1.6	Cloud Computing Reference Model	T2	1	Assignment
				1.7	Characteristics and Benefits	T2	1	Test
				1.8	Challenges Ahead	T2	1	
				1.9	Historical Developments	T1	1	
Total					09			
		2.1	Virtualization: Introduction	T1	1	Chalk & Board		
		2.2	Characteristics of Virtualized Environment	T1	1			
		2.3	Classification of Virtualization Techniques	T1	1	Power point presentations		
		2.4	Virtualization and Cloud computing	T1	1			
		2.5	Pros and Cons of	T1	1			



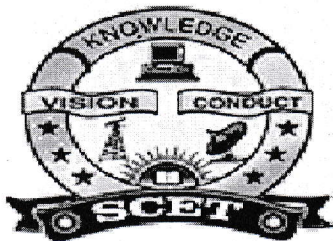
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II	CO – 2		Virtualization			Assignment Test
		2.6	Technology Examples-VMware	T1	1	
		2.7	Microsoft Hyper-V	T1	1	
		2.8	Multi thread programming models	T1	1	
		2.9	Before the Move into the Cloud: Know Your Software Licenses	T1	1	
		2.10	The Shift to a Cloud Cost Model	T1	1	
		2.11	Service Levels for Cloud Applications	T1	1	
				Total	11	
III	CO – 3	3.1	Cloud Computing Architecture: Introduction	T1	1	Chalk & Board Power point presentations Assignment Test
		3.2	Architecture	T1	1	
		3.3	Infrastructure / Hardware as a Service	T1	1	
		3.4	Platform as a Service	T1	1	
		3.5	Software as a Service, Types of Clouds	T1	1	
		3.6	Public Clouds, Private Clouds	T1	1	
		3.7	Hybrid Clouds	T1	1	
		3.8	Community Clouds	T1	1	
		3.9	Economics of the Cloud	T1	1	
		3.10	Open Challenges	T1	1	
		3.11	Cloud Interoperability and Standards	T1	1	
Course beyond syllabus		3.12	Scalability and Fault Tolerance	T1,T3	1	
				Total	12	
IV	CO – 4	4.1	Defining the Clouds for Enterprise: Introduction	T1	1	Chalk & Board Power point presentations Assignment Test
		4.2	Storage as a service	T1	1	
		4.3	Database as a service	T1	1	
		4.4	Process as a service	T1	1	
		4.5	Information as a service	T1	1	
		4.6	Integration as a service and Testing as a service	T1	1	
		4.7	Scaling cloud infrastructure -Capacity	T1	1	

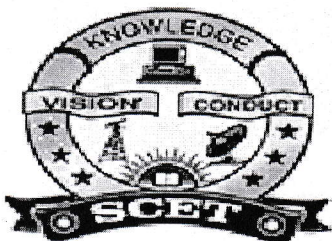


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			Planning			
		4.8	Cloud Scale	T1	1	
		4.9	Disaster Recovery: Introduction	T1	1	
		4.10	Disaster Recovery Planning	T1	1	
		4.11	Disasters in the Cloud	T1	1	
		4.12	Disaster Management	T1	1	
Total					12	
V	CO – 5	5.1	Aneka: Cloud Application Platform Framework Overview	T1, R1	1	Chalk & Board Power point presentations Assignment Test
		5.2	Anatomy of the Aneka Container	T1, R1	1	
		5.3	From the Ground Up: Platform Abstraction Layer	T1, R1	1	
		5.4	Fabric Services, Foundation Services, Application Services	T1, R1	1	
		5.5	Building Aneka Clouds	T1, R1	1	
		5.6	Infrastructure Organization, Logical Organization	T1, R1	1	
		5.7	Private Cloud Deployment Mode, Public Cloud Deployment Mode ,Hybrid Cloud Deployment Mode	T1, R1	1	
		5.8	Cloud Programming and Management	T1, R1	1	
Course beyond syllabus		5.9	Aneka SDK, Management Tools	T1, R1	1	
Total					9	
VI	CO– 6	5.1	Cloud Applications: Scientific Applications – Health care	T1, R1	1	Chalk & Board Power point presentations Assignment
		5.2	Geo science and Biology	T1, R1	1	
		5.3	Business and Consumer Applications- CRM and ERP	T1, R1	1	
		5.4	Social Networking, Media Applications and Multiplayer Online Gaming	T1, R1	1	
		5.5	Cloud Platforms in	T1, R1	1	



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		Industry			Test
	5.6	Amazon Web Services- Compute Services	T1, R1	1	
	5.7	Storage Services, Communication Services and Additional Services	T1, R1	1	
	5.8	Google App Engine- Architecture and Core Concepts	T1, R1	1	
	5.9	Application Life-Cycle	T1, R1	1	
	5.10	cost model	T1, R1	1	
	5.11	Microsoft Azure- Azure Core Concepts	T1, R1	1	
	5.12	SQL Azure	T1, R1	1	
Total				12	
CUMULATIVE PROPOSED PERIODS				65	

Text Books:

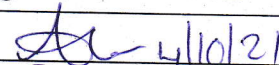
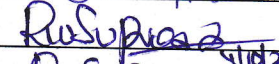
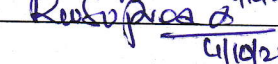
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	Rajkumar Buyya, Christian Vecchiola, S.Thamarai Selvi, "Mastering Cloud Computing", TMH, 2013.
2	M.N.Rao, "Cloud Computing", PHI Learning Private Limited, 2015.

Reference Books:

S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION
1	David S. Linthicum, Cloud Computing and SOA Convergence in Your Enterprise, A Step-by-Step Guide from Pearson, 2010.
2	Dr. Kumar Saurabh, Cloud Computing, 2nd Edition, Wiley India, 2012.
3	Micheal Miller, Cloud Computing – web based Applications that change the way you work and collaborate Online –.Pearson Education

Web Details:

1	https://www.javatpoint.com/cloud-computing-architecture
2	https://www.geeksforgeeks.org/types-of-cloud/

		Name	Signature with Date
i.	Faculty	Mrs. V Alekhya	 4/10/21
ii.	Module Coordinator	Dr. RVVSV Prasad	 4/10/21
iii.	Programme Coordinator	Dr. RVVSV Prasad	 4/10/21


Principal