

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme		Bachelor of Technology			Branch/Spec.		Computer Science & Engineering (CBA)		
Semester		VI			Version		1.0.1.1		
Effective from Academic Year			2018 - 19		Effective for the batch Admitted in			June 2016	
Subject code		2CSE60E1		Subject Name		Enterprise Application development for Cloud			
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	0	2	0	5	Theory	40	60	100
Hours	3	0	4	0	7	Practical	60	40	100
Pre-requisites:									
Cloud Computing Essentials									
Learning Outcome:									
Students successfully completing this course will be able to:									
<ul style="list-style-type: none"> • Develop and deploy different types of applications on public cloud • use different types of database services to store data and bind with application on cloud • deploy applications using third party software • Develop Big Data application • Develop IoT application • Develop Mobile application 									
Theory syllabus									
Unit	Content								Hrs
1	Introduction to Cloud and Bluemix Web service Development and Cloud Computing Overview, Understanding cloud service models and deployment models, Understanding IBM Bluemix, Consumption View – IaaS (Soft Layer), PaaS (IBM Bluemix), BlueMix Architecture ; BlueMix Overview and Dashboard Bluemix Architecture, Cloud foundry architecture, Understanding git and ant.								12
2	DevOps service Understanding DevOps service, Understanding Toolchain, Working with DevOps service, Understanding JSON, REST architecture								10
3	Development of Apps using Data Services Understanding Data services-SQL, NoSQL, Columnar databases, Cloudant Database, Working with Cloudant Database ,JSON and SQL databases								8
4	Bluemix Services in Mobility, Big Data & IOT Understanding Mobile services- Mobile Backend and Messaging services, Push Notification service, Understanding Big Data and Analytics, Understanding Internet of Things(IoT) and IoT application development using cloud, NODE RED editor								8
5	Understanding AI and IBM watson services, Cloud security, Security services on cloud								6
Practical content									
<ul style="list-style-type: none"> • Cloud application development using CF CLI • Cloud application development using local workstation(Eclipse)-JAVA and MySQL • Cloud application development using local workstation(Eclipse)-NODE.JS • Cloud application development using Toolchain- Devlops 									

- Cloud application development using Cloudant-NO SQL database\
- Working with Cloudant, JSON and SQL databases
- Android mobile application development using IBM BlueMix mobile services
- Push Notification service for Android mobile application
- Developing Big data application using Map
- Reduce Service to perform analytics for Big Data Sets
- Developing IoT application using NODE Red and Database services
- Hands on IBM Watson services.
- Hands on Cloud security services

Text Books	
	Redbook : IBM Bluemix The Cloud Platform for Creating and Delivering Applications by Raffaele Stifani