

III SEMESTER CORE COURSES

EMERGING EXPONENTIAL TECHNOLOGIES			
Course Code	20MBA301	CIE Marks	40
Teaching Hours/Week	3:0:2	SEE Marks	60
Credits	04	Exam Hours	03
Objective of the Course: <ol style="list-style-type: none"> 1. To understand the emerging technologies applicable in field of Management. 2. To study data science as a tool for decision making in Management 3. To understand the concept of AI, IOT and AR. 4. To study other emerging technologies in Management. 			
Module -1 Introduction to Emerging Technologies			9 hours
Evolution of technologies; Introduction to Industrial revolution; Historical background of the Industrial Revolution; Introduction to Fourth industrial revolution (IR 4.0); Role of data for Emerging technologies; Enabling devices and networks for emerging technologies (programmable devices); Human to Machine Interaction; Future trends in emerging technologies.			
Module -2 Data Science			7 hours
Overview for Data Science; Definition of data and information; Data types and representation; Data Value Chain; Data Acquisition; Data Analysis; Data Curating; Data Storage; Data Usage; Basic concepts of Big Data.			
Module -3 Artificial Intelligence(AI)			9 hours
Concept of AI, meaning of AI, History of AI, Levels of AI, Types of AI, Applications of AI in Agriculture, Health, Business (Emerging market), Education, AI tools and platforms (eg: scratch/object tracking).			
Module -4 Internet of Things (IoT)			9 hours
Overview of IOT; meaning of IOT; History of IOT; Advantages of IOT; Challenges of IOT; IOT working process; Architecture of IOT; Devices and network; Applications of IOT at Smart home; Smart grid; Smart city; Wearable devices; Smart farming; IOT tools and platforms; Sample application with hands on activity.			
Module-5 Augmented Reality (AR) and Virtual Reality (VR)			9 hours
Introduction to AR, Virtual reality (VR), Augmented Reality (AR) vs mixed reality (MR), Architecture of AR systems. Application of AR systems (education, medical, assistance, entertainment) workshop oriented hands demo.			
Module-6 Ethics, Professionalism and Other Emerging Technologies			7 hours
Technology and ethics, Digital privacy, Accountability and trust, Treats and challenges.			
Other Technologies: Block chain technology, Cloud and quantum computing, Autonomic computing, Computer vision, Cyber security, Additive manufacturing (3D Printing)			
Course Outcomes: By the end of this course the student will able to: <ol style="list-style-type: none"> 1. Identify different emerging technologies 2. Select appropriate technology and tools for a given task 3. Identify necessary inputs for application of emerging technologies 4. Understand the latest developments in the area of technology to support business 			
Practical Component: <ul style="list-style-type: none"> • Big data analysis using an analytical tool • Study the Application of AI in any one field and prepare a Report • Study the Ethical practices of a Company • 3D model Printing by Group or team • Exposing the students to usage of IoT 			

CO-PO mapping					
CO	PO				
	PO1	PO2	PO3	PO4	PO5
CO1	×				
CO2	×	×		×	
CO3	×	×		×	
CO4	×				

Question paper pattern:

The SEE question paper will be set for 100 marks and the marks scored will be proportionately reduced to 60.

- The question paper will have 8 full questions carrying equal marks.
- Each full question is for 20 marks.
- Each full question will have sub question covering all the topics under a Module.
- The students will have to answer five full questions; selecting four full question from question number one to seven and question number eight is compulsory.
- 100 percent theory in the SEE.

Sl No	Title of the book	Name of the Author/s	Publisher Name	Edition and year
1	Designing for Emerging Technologies: UX for Genomics, Robotics, and the Internet of Things	Follett, J.	O'Reilly Media	2014
2	Emerging Technologies for Emerging Markets	Vong, J., & Song, I.	Springer Singapore	2014
3	Disruption: Emerging Technologies and the Future of Work	Del Rosal, V.	Emtechub.	2015
4	Emerging Internet-Based Technologies	Sadiku, M. N. O	CRC Press	2019
Reference Books				
1	Digital Economy. Emerging Technologies and Business Innovation,	Mohamed Anis Bach Tobji, Rim Jallouli, Yamen Koubaa, Anton Nijholt		2018
2	Virtual & Augmented Reality for Dummies	Paul Mealy,		2018
3	Augmented Reality and Virtual Reality: Empowering Human, Place and Business,	Timothy Jung, M. Claudia tom Dieck		2019


 DEAN
 Dept. of Business Administration
 Alva's Institute of Engg. & Technology
 MIJAR - 574 225