

SYSTEMS (IT)
SEM III

I> Course Content

Semester	:	III-Core		
Title of the Subject / course	:	Big Data and Business Analytics		
Course Code	:	MMSSC 303 (RGCMS)		
Credits	:	4	Duration	: 40

Learning Objectives	
1	To understand the Introduction to Big Data and Business Analytics and its applications
2	To understand the Business Analytics Cycle Introduction, Analytical Tools & Methods
3	To understand Data Mining & decision-Making concepts, Predictive Analysis, Forecasting Optimization, Simulation, and Business Metrics etc.
4	To understand the Data Driven Prediction Methods NLP, Regression, Correlation, Cluster Analysis, Artificial Neural Networks, BI Tools & Applications

Prerequisites if any	Basic understanding of operations, framework
Connections with Subjects in the current or Future courses	Will connect conceptual framework to Big Data and business Analytics.

Module

Sr. No.	Content	Activity	Course outcomes
1	Introduction to Data Analytics Need for Business Intelligence Data Management, Data Visualization, Data Warehousing, ETL Data Processing Chain from Business Intelligence to Business Analytics	Lecture	MMSSC 303.1
2	Business Analytics Cycle Introduction, Analytical Tools & Methods, Integration Social Analytics, Operational Analytics Big Data Analytics, Hadoop, Informatics, Cognos etc. Business application of big data analytics	Lecture & cases	MMSSC 303.2
3	Data Mining & decision-Making Predictive Analysis Forecasting Optimization Simulation Gamification.	Lecture	MMSSC 303.3

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4	Business Metrics in Action Data science in Startups Basics of Problem-Solving Design Patterns in Statistical Computing Excel for Data Science.	Lecture and cases	MMSSC 303.4
5	Data Driven Prediction Methods NLP, Regression, Correlation, Cluster Analysis, Artificial Neural Networks, BI Tools & Applications.	Lecture and cases	MMSSC 303.5
6	Case Studies and presentations	Lecture & Cases	

II> Course Outcomes

Course Codes	Course Outcomes Students will be able to...	Cognition
MMSSC 303.1	CO1: Understand the concepts of Big Data and Business Analytics	Understand
MMSSC 303.2	CO2: Understand Business Analytics Cycle, Analytical tools and methods	Understand
MMSSC 303.3	CO3: Understand Data Mining and Decision making	Understand
MMSSC 303.4	CO4: Analyze business metrics	Analyze
MMSSC 303.5	CO5: Analyze data driven prediction methods	Analyze

Text books	
1	Big Data Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses by Michael Minelli
2	Big Data & Analytics by Chellappan and Acharya
3	Big Data Analytics with R & Hadoop by Vignesh Prajapati
4	Big Data Analytics Made Easy by Y Lakshmi Prasad
5	Data Science for Business by Foster Provost & Tom Fowcett

Reference books	
1	Business Analytics: Data Analysis and Decision Making by S. Christian Albright
2	Big Data: Using Smart Big Data, Analytics and Metrics to Make Better Decisions and Improve Performance by Bernard Marr
3	Data Science and Big Data Analytics by EMC Education Services
4	Analytics in a Big Data World by Bart Baesens