



SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act 1956)

Re - accredited by NAAC with 'A' Grade

Founder: Prof. Dr. S. B. Mujumdar, MSc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

Course Name : Business Intelligence
Course Code : T3675
Faculty : Computer Studies
Course Credit : 3
Course Level : 4
Sub-Committee (Specialization) : IT Infrastructure Management

Learning Objectives :

- To understand leadership insights required to affect the success in both simple and complex projects using BI tools
- To classify various information systems used in Domestic and International business
- To analyze and design business strategies, tactics, and operations are enabled through Information Systems
- To explore how business data are collected, organized, and stored for obtaining intelligent insights
- To compare different premise and cloud based software "s to explore and analyze different data patterns
- To implement BI techniques using various BI tools.

Books Recommended :

Book	Author	Publisher
Business intelligence and analytics: Systems for decision support	Sharda, R., Delen, D., & Turban, E.	Boston: Pearson.
Analyzing Data with Power BI and Power Pivot for Excel	Alberto Ferrari and Marco Russo	Microsoft Press
Business Intelligence Practices, Technology and Management	Rajiv Sabherwal and Irma Becerra-Fernandez,	John Wiley and Sons
Dimensional Modeling: In a Business Intelligence Environment	Chuck Ballard, Daniel M. Farrell, Amit Gupta, Carlos Mazuela, Stanislav Vohnik	IBM RedBooks www.IBM.com/redbooks
Introduction to Information Systems	Patricia Wallace, John's Hopkins	Pearson

Course Outline :

Sr. No.	Topic	Actual Teaching Hours	Contact Hours Equivalence
1	Components of BI Architecture: course & syllabus overview, intro to class tools, MIS, decisions, and problem solving, Strategy, enterprise architecture, enterprise systems, information ethics and security Power BI Lab, BI issues and challenges	6	6
2	Organizing and Accessing Data for Decision Making (Power BI Lab): Business Intelligence, databases and transaction processing, Intro to Power BI: preparing data, Data modeling part 1: transactions to decisions, Data modeling part 2: building metrics in Power BI	6	6
3	Technologies enabling BI: Technologies enabling Organizational memory, Technologies enabling Information integration, Technologies enabling Insights and decision, Technologies enabling presentation BigQuery Lab	6	6

4	Gaining Insights (R/RStudio Lab): Introducing R & RStudio. Data mining, Text mining, Predictive analytics and Prescriptive analytics. : Mining Model Algorithms - Decision Trees, Clustering, Naïve Bayes, Time Series, Association, Sequence Clustering, Neural Network, Linear Regression, Logistic Regression. Real Time Social Media Project 1	6	6
5	Real Time Social Media & Health Care Domain Project 2. Executing the Project: Obtaining Personnel and Building a Team, Project Leadership and Management, Risk Management, Quality Management, Manage Communications and Stakeholder Engagement, Effective Presentations and Writing, Executing Procurements.	6	6
6	Real Time Education Domain Project 1. Visualizing data part 1, Visualizing data part 2, Analyzing data & overview, Communicating data with dashboards. Tableau Lab	7	7
7	BI Lab using Power BI, Tableau, Big Query & R. Real Time Education Domain Project 2. Real Time Social Media Project 2.	8	8
Total		45	45

Pre Requisites :

Basics of data warehousing and database management systems

Evaluation :

Assignment
Class test
case studies
Quiz
Presentation
Project

Pedagogy :

Lecture & Class Participation
Case Study
Group Discussions
Presentations
BI Lab Work

Expert :

Dr. Sachin Naik,Assistant Professor,SICSR
Mr. Omprakash Lalchandani,,Aducard Education Firm