SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act, 1956)

Re-accredited by NAAC with 'A++' Grade | Awarded Category – I by UGC

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

Course Name: Business Analytics

Course Code: T2228

Faculty: Management

Course Credit: 3

Course Level: 4

Sub-Committee (Specialization):   Quantitative Studies and Analytics

Learning Objectives:

To equip students to critically evaluate business situations and analyze business data for decision making

To enable students to synthesize concepts of data mining and business intelligence

Books Recommended:

Book	Author	Publisher
Analysis of Financial Time Series	by Ruey Tsay	Wiley Series in Probability and Statistics, 2009.
Business Analytics for Managers	(2011),Kank Wolfgang	Springer Publications New York.
Business Analytics for Managers: Taking Business Intelligence beyond Reporting	(2010), Gert H. N. Laursen, Jesper Thorlund	John Wiley& Sons Publications,New Jersey.
Business Analytics:Methods,Models and Decisions	(2012),Evans,R.James	Cengage Learning
Data and Text Mining- A Business Applications Approach	Miller T.W. (2005)	Pearson, New Jersey
Forecasting: Methods and Applications	by Spyros G. Makridakis, Steven C. Wheelwright, Rob J Hyndman.	
Introductory Time Series with R	by Cowpertwait and Metcalfe	Springer, 2009.

Course Outline:

Sr. No.	Topic	Actual Teaching Hours	Contact Hours Equivalence
1	**Foundations of Business Analytics** Introduction to Business Analytics Analytics on Spreadsheets Introduction to Big Data	3	0
2	**Descriptive Analytics** Visualizing and Exploring Data Descriptive Statistical Measures Probability Distributions and Data Modeling Statistical Inference	8	0
3	**Predictive Analytics** Predictive Modeling and Analysis Regression Analysis Forecasting Techniques Risk Analysis Introduction to Data Mining	10	0

4	**Prescriptive Analytics**	10	0
	Linear Optimization		
	Applications of Linear Optimization		
	Integer Programming		
	Logistic Models		
5	**Making Decisions**	5	0
	Decision Analysis		
6	**Business Intelligence**	5	0
	Data warehousing & OLAP		
	Business Performance Management		
	Balanced Scorecard and Dashboard		
7	**Simulation Models**	4	0
	Total	45	0

Pre Requisites:

Basic Statistics
Operations Research

Evaluation:

Case Theory Mix
20% cases, 80% Theory

Pedagogy:

Lectures
Case studies with real life data
Use of advanced statistical softwares

Expert:

Prof. Asmita Chitnis,,