

Subject Code: 1MS3010503	Subject Title: Business Intelligence and Analytics
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1. Course Objectives:

This course is intended to apply data analytics skills to the area of business intelligence (BI). Focus is placed on the components of business intelligence project lifecycle such as project planning, BI tool selection, data modelling, ETL design, BI application design and deployment and reporting. This course is designed for individuals interested in BI practices and analysis without a detailed focus on statistical analysis and computer programming.

2. Learning Outcomes:

By the end of this course, the students will be able to understand real-world experiences using Business Intelligence (BI) methodologies, processes, architectures and technologies. Specifically, students will:

- Examine the business intelligence project lifecycle
- Describe business intelligence methodology and concepts
- Understand various types of analytics and review selected applications
- Explore the nature of data as it relates to business intelligence and analytics
- Learn different types of data visualization
- Explain data integration and the extraction, transformation and load (ETL) process
- Review standardized data mining processes

3. Teaching Scheme (Hours per week)

Lecture (Hrs.)	Tutorial	Practical	Credit	Examination Evaluation		Total
				University Assessment	Continuous Assessment	
4	0	0	4	60	40	100

4. Syllabus:

Module No.	Contents	Total Hours	Weight (%)
1	Introduction to Business Intelligence and Analytics Overview of Business Intelligence, Introduction to Data Analytics, Introduction to Business Intelligence LifeCycle	5	25
2	Nature of Data, Statistical Modeling and Visualization Data in a Business Environment, Introduction to Statistical Modeling, Descriptive and Inferential Statistics, Approaches to Data Visualization	5	25
3	Data Warehousing, Mining Process and Methods Data Warehousing,	15	25

	The ETL Process, Data Mining, Processes and tools, Privacy Considerations		
4	Data Visualization and Big Data Introduction: Tools and Technologies, Dashboards, Bringing the Project Together, Big Data Concepts and Tools and contemporary practices.	15	25

5. Suggested Reference Books:

Author /s	Name of the Book	Publication
Ramesh Sharda, DursunDelen, Efraim Turban,	Business Intelligence, Analytics and Data Science: A Managerial Perspective	Pearson Fourth Edition
Efraim Turban, Ramesh Sharda, DursunDelen	Decision support and Business Intelligence Systems	Pearson(Latest)
Grossmann W, Rinderle-Ma	Fundamental of Business Intelligence	Springer(Latest)

6. Evaluation Scheme

The evaluation of participants will be on continuous basis comprising of the following Elements:

Sr. No.	Component	Weight
1	University Examination * For the written examination, the open book examination may be opted by the paper setter appropriately	60%
2	Internal Assessment -Depending on the need and objectives of the subject, internal assessment should include minimum three of the following sub-components; <i>Class Test, Quiz, Assignments, Case Presentation, Class Participation, Projects, Team/Individual Assignments.</i> -The weightage of a sub-component should not exceed 50% of internal assessment component weight. -The bifurcation of sub-components shall be communicated by the instructor before commencement of the academic sessions.	40%