

M.Sc. Computer Science Syllabus Second Year (2019-24) (Sem - IV)
Business Intelligence






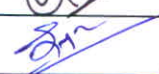


Semester IV	Subject Code: MSE41902	Lectures: 60
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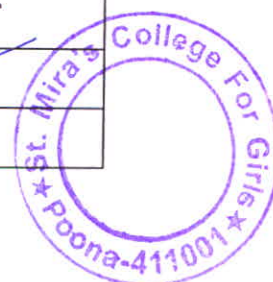
Objectives:

The syllabus aims in equipping students with,

- the role of BI in enterprise performance management and decision support.
- the applications of data mining and intelligent systems in managerial work.
- data warehousing and online analytical processing (OLAP) concepts, including dimensional modeling, star and snowflake schemas, attribute hierarchies, metrics, and cubes.
- data analysis and reporting using an available BI software.

Unit 1: Introduction to Business intelligence	14
Chapter 1 : Introduction to Business intelligence <ul style="list-style-type: none"> • Definition and History of BI, • Transaction processing versus analytical processing, • BI implementation , • Major tools and techniques of BI 	04
Chapter 2 : Data warehousing <ul style="list-style-type: none"> • Definition and concepts • Data warehouse architecture • ETL process, data warehouse development • Top down vs. Bottom up, Data Mart vs. EDW • Implementation issues, • Real-time data warehousing 	10

Sr. No.	BOS member		Sign
1	Dr. Razak Sayyed	Subject Expert	
2	Prof. Abhijit Sathe	Subject Expert	
3	Prof. Sonali Deshmukh	Subject Expert	
4	Mr. Sumeet Kakroo	Industry Expert	
5	Ms. Jyoti Sharma	Alumni	
6	Prof. Ashwini Kulkarni	Chairman	
7	Prof. Swati Pulate	Internal Faculty	
8	Prof. Smita Borkar	Internal Faculty	



Unit 2: Business performance management	24
Chapter 3 : Business performance management <ul style="list-style-type: none"> • Key performance indicators and operational metrics • Balanced scorecard • Six Sigma • Dashboards and scorecards 	14
Chapter 4 : Data Mining for Business Intelligence <ul style="list-style-type: none"> • Data mining process • Data mining methods • ANN for Data Mining 	10

Unit 3: Text and Web mining and Integration and emerging trends	18
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Chapter 5 - Text and Web mining for Business intelligence <ul style="list-style-type: none"> • Text mining Applications • Process and Tools • Web content • structure and usage mining 	8
Chapter 6 : BI implementation , Integration and emerging trends <ul style="list-style-type: none"> • Implementing BI, BI Application Life Cycle • Connecting BI to Enterprise systems • On- demand BI, Issues of legality • privacy and Ethics • Emerging topics in BI • Social Networking and BI, RFID and BI 	10


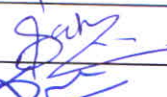
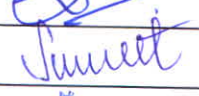




*Contact hours=04

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8	Prof. Smita Borkar	Internal Faculty	



Reference Books:

1. EfraimTurban, Ramesh Sharda, Dursun Delen, and David King:
Business Intelligence: A Managerial Approach, 2nd Edition, PEARSON
2012
ISBN-10: 0-13-610066-X
ISBN-13: 978-0-13-610066-9
2. Simon Miller, William Hutchinson :Oracle Business Intelligence Applications,
McGraw Hill Education 2013
ISBN-10: 93-5134-153-4
ISBN-13: 978-93-5134-153-6

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