

**NIRMA UNIVERSITY**  
**Institute of Management**  
**Master of Business Administration (Full Time) Programme**

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<b>Course Code</b>	<b>MFT5GEXX01</b>
<b>Course Title</b>	<b>Big Data Architecture and Applications</b>

**Course Learning Outcomes (CLO):**

At the end of the course, students will be able to:

1. Demonstrate an understanding of Big Data and its applications
2. Discover the scope of Big Data in Business
3. Explain Big Data Architecture and Technology

**Syllabus**

**Teaching Hours**

<b>Unit I: Big Data Fundamentals</b> <ul style="list-style-type: none"><li>• Introduction to Big Data and its Business Applications</li><li>• Hadoop: Distributed File System</li><li>• Hadoop I/O</li><li>• Combiners</li><li>• Developing for Clusters</li><li>• Map Reduce and it's working;</li><li>• Types of Map Reduce and Formats</li><li>• Map Reduce Features</li></ul>	09
<b>Unit II: Big Data Technologies</b> <ul style="list-style-type: none"><li>• Hadoop Streaming</li><li>• Partitioners</li><li>• Information Retrieval and Models</li><li>• Query Languages</li><li>• TF IDF in Map Reduce</li><li>• Data security and Big Data</li></ul>	06

**Suggested Readings:**

1. Erl, T., Khattak, W., & Buhler, P., *Big Data Fundamentals: Concepts, Drivers & Techniques*. Pearson Education.
2. Baesens, Bart., *Analytics in a Big Data World*; Wiley India, New Delhi.
3. Minelli, Michael, Chamber, Michele and Dhiraj, Ambiga., *Big Data Big Analytics*, Wiley India, New Delhi

w.e.f. Academic Year 2019-20 and onwards