

PCS 205 BIG DATA ANALYTICS AND BUSINESS INTELLIGENCE				
	L	T	P	Cr
	3	0	2	4.0
<p>Course Objective: To have an advanced level of understanding of most recent advancements in Big Data and using insights, statistical models, visualization techniques for its effective application in Business intelligence.</p>				
<p>Introduction to Data Analytics: Data and Relations, Data Visualization, Correlation, Regression, Forecasting, Classification, Clustering.</p> <p>Big Data Technology Landscape: Fundamentals of Big Data Types, Big data Technology Components, Big Data Architecture, Big Data Warehouses, Functional vs. Procedural Programming Models for Big Data.</p> <p>Introduction to Business Intelligence: Business View of IT Applications, Digital Data, OLTP vs. OLAP, BI Concepts, BI Roles and Responsibilities, BI Framework and components, BI Project Life Cycle, Business Intelligence vs. Business Analytics.</p> <p>Big Data Analytics: Big Data Analytics, Framework for Big Data Analysis, Approaches for Analysis of Big Data, ETL in Big Data, Introduction to Hadoop Ecosystem, HDFS, Map-Reduce Programming, Understanding Text Analytics and Big Data, Predictive analysis on Big Data, Role of Data analyst.</p> <p>Business implementation of Big Data: Big Data Implementation, Big Data workflow, Operational Databases, Graph Databases in a Big Data Environment, Real-Time Data Streams and Complex Event Processing, Applying Big Data in a business scenario, Security and Governance for Big Data, Big Data on Cloud, Best practices in Big Data implementation, Latest trends in Big Data, Latest trends in Big Data, Big Data Computation, More on Big Data Storage, Big Data Computational Limitations.</p> <p>Laboratory Work: Introduction, use and assessment of most recent advancements in Big Data technology along with their usage and implementation with relevant tools and technologies.</p>				
<p>Recommended books:</p> <ol style="list-style-type: none"> 1. Minelli M., Chambers M., Dhiraj A., Big Data, Big Analytics: Emerging Business 2. Intelligence and Analytic Trends for Today's Businesses, Wiley CIO Series(2013),1sted. <p>White T., Hadoop: The Definitive Guide, O' Reilly Media (2012), 3rd ed.</p>				