

Course Title	BIG DATA ANALYSIS
Course Code	CSC 312
Course Purpose and Objectives	The purpose of this course is to provide knowledge on what big data can offer through real life examples and hands-on exercises. Students will learn the various big data modeling techniques. Students will be guided through the basics of using Apache Spark and by the end of the course they will be able to analyze unstructured data and develop small ETL project using Apache Spark to refine those datasets.
Learning Outcomes	<ol style="list-style-type: none"> 1. Explain the fundamentals of Big Data. 2. Categorize and examine the various big data modeling techniques. 3. Explain the fundamentals of Cloud Security. 4. Analyze and recommend batch or stream data ingestion mechanisms for specific case studies. 5. Implement basic Apache Spark software that processes unstructured data, converting them to structured datasets.
Course Content	<ul style="list-style-type: none"> • Introduction to Big Data • The 5 V's of Big Data • Getting Value out of Big Data • Big Data Modeling and Management • Big Data Battle : Batch Processing vs Stream Processing • Introducing Apache Spark • Data Partitioning and Shuffling