Course Code: CSOE6	**Course Title: INTRODUCTION TO POWER BI AND DAX**
Course Credits: 03	**Hours/Week:** 03
Total Contact Hours: 42	**Formative Assessment Marks**: 40
Exam Marks: 60	**Exam Duration:** 02 Hrs

Course Description

This course serves as an entry point for individuals eager to harness the capabilities of Power BI and master the fundamentals of DAX (Data Analysis Expressions). Participants will explore the Power BI ecosystem, learn to import and transform data, create compelling visualizations, and leverage DAX for advanced data analysis. Through hands-on exercises and practical examples, students will gain the essential skills needed to kickstart their journey into self-service business analytics.

Course Outcome

CO1: Understanding Power BI Basics

CO2: Proficiency in Data Modeling with Power BI

CO3: Mastery of DAX Functions:

CO4: Understanding and applying data modelling and visualisation techniques using the advanced features of Power BI

CO5: Creating Dashboard using Power BI

CO6: Learning security, Collaboration, and best practices of Power BI

Unit 1: Introduction to Power BI   [8 Hours]

Overview of Power BI and its advantages, Navigating the Power BI interface, Importing data from various sources into Power BI.

Unit 2: Data Transformation and Modeling   [8 Hours]

Cleaning and shaping data using Power Query Editor, Introduction to data

modeling concepts in Power BI, Creating relationships between tables for effective analysis.

Unit 3: Visualizations in Power BI [10 Hours]

Building basic to intermediate visualizations (charts, graphs, maps, etc.), Enhancing visualizations with formatting options and interactivity, Implementing filters and slicers for dynamic analysis.

Unit 4: Introduction to DAX [10 Hours]

Understanding the role of DAX in Power BI, Basic DAX functions for calculations and measures, Practical exercises to apply DAX formulas in Power BI reports, Designing and creating dashboards in Power BI.

Unit 5: Advanced DAX [6 Hours]

Exploring advanced DAX functions and techniques, Hands-on exercises to deepen understanding of DAX capabilities.

<Consider changing this>

REFERENCE BOOKS:

1. Mastering Microsoft Power BI By **Brett Powell**
2. Beginning Power BI by Dan Clark