Course Code: BCS01T1001	Data Analytics Using Excel and Tableau	L	T	P	C
	Date of Approval: 05.11.2020	1	0	0	1
Pre-requisites//Exposure	Nil				
Co-requisites	Nil				

Course Objectives

1. This course helps to understand data and usage of data in solving real time problems.
2. It also explains the fundamental concepts of big data analytics and data visualization.
3. Introduce the concept of Tableau and data analysis.

Course Outcomes

At the end of the course, the student will be able to:
1.   Understand data and usage of data in data analytics.
2.   Apply data analytics techniques for visualization through Excel.
3.   Visualize trends and discover insights of data analysis using tableau

Course Description

Data Analysis is an ever-evolving discipline with lots of focus on new predictive modeling techniques coupled with rich analytical tools that keep increasing our capacity to handle big data.The ability to analyze data is a powerful skill that helps you make better decisions. Microsoft Excel is one of the top tools for data analysis and the built-in pivot tables are arguably the most popular analytic tool.

In this course students will learn how to perform data analysis using Excel's most popular features. Students will learn how to create pivot tables from a range with rows and columns in Excel. Tableau will also be explored for visualisation and analytics.

Text Book

Books:

1. Microsoft Excel 2013 Step by Step by Curtis D. Frye; Microsoft Press 2013.

2. Learning Tableau by Joshua N. Milligan,ISBN 139781784391164, PACKT Books - Packt Publishing

Reference Books

1. Excel: Quick Start Guide from Beginner to Expert, by William Fischer

Course Content

Unit 1: Introduction to Data Analytics   2 hours

Introduction to Spreed sheets, Installing Data Analysis Tool in Excel, Reading Data, Manipulating data, Basic Operations and Functions.

Unit 2: Manipulation of Excel Data   3 hours

Working with Formula, Working with functions, Introduction to Filtering Pivot tables and charts

Unit 3: Exploring Analysis Tool pack   2 hours

Histogram, Descriptive Statistics, Moving Average, Exponential, Correlation, Regression

Unit 4: Introduction to Tableau   3 hours

Introduction about Tableau, Installing Tableau Public, Getting Data, visualizing data on maps, Advanced Graphing and Charting.

Mode of Evaluation: Class Quiz, Assignment, MTE, and ETE.

Components	Theory without PBL			
	Internal (50)			SEE
Marks	MTE (30)	Quiz (10)	Assignment (10)	Semester End Exam (50)
Total Marks	100			

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between Cos and Pos		
Sl. No.	Course Outcomes (COs)	Mapped Program Outcomes
CO-1	Understand data and usage of data in data analytics	1,2,3,4
CO-2	Apply data analytics techniques for visualization through Excel.	1,2,3
CO-3	Visualize trends and discover insights of data analysis using tableau	1,2,4,5