

## CSC1604L1: Data Management For Business Decisions

**Credits: 3**

**Hours: 40**

### **Objectives:**

- To understand the role of business analytics within an organization
- To analyze data using excel and SPSS and understand relationships between the underlying business processes of an organization.

### **Unit 1: Basics of Excel**

**10 hrs**

Getting Acquainted with Excel, Creating Basic Spreadsheets, Using Ranges, Creating Formulas. Copying and Pasting Formulas, Columns and Rows, Formatting Spreadsheets, Setting Spreadsheet Layout, Consolidating Spreadsheets. Spreadsheet Charts, Editing and Formatting Charts, Sorting Data, Auto Filtering Data.

### **Unit 2: Data Handling and Decision making**

**10 hrs**

**Data Handling** - Controlling User Input, Working with Dates and Times, Working with Text, Lookup and Reference, Logical Functions, what-if analyses.

**Business decision using spread sheet** - Working with Numbers, Summarizing Data, PivotTables 1, Simple Summaries, Manipulating Data, Interpreting Data, Power Pivot, Advanced Macros and VBA.

### **Unit 3: Analytics using SPSS**

**10 hrs**

Different types of data; Data Visualization; Data visualization methods; Tables, Graphs, Charts, Histograms, Frequency distributions, Regression models Simple linear regression, multiple linear regressions: Non- linear regression; Logistic regression

### **Unit 4: Advanced Analytics and Decision making**

**10 hrs**

Cluster Analysis and classification, Principal component analysis, Factor analysis, Discriminant Analysis.

### **References:**

1. Albright Winston Zappe, (2006). *Data Analysis and Decision Making with Microsoft Excel Hobson Publications*, 3<sup>rd</sup> Edition.
2. Conrad Carlberg, (2008). *Business Analysis with Microsoft Excel, Pearson Education*, 3<sup>rd</sup> Ed.
3. Naresh K. Malhotra, (2003) *Marketing Research an Applied Orientation*, Pearson Education.
4. Thomas Devonport, *Competing on analytics: The new science of winning*