MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act,1956

EMPOWERING THROUGH INNOVATIONS
MLRS

COURSE CONTENT

PROJECT MANAGEMENT

I YEAR II SEMESTER

Course Code	Category	Hours/Week			Credits	Maximum Marks		
		L	T	P	C	CIE	SEE	Total
25MB015A	**CORE**	1	0	2	2	40	60	100

Contact Classes: 15	Tutorial Classes: Nil	Practical Classes: 30	Total Classes: 45

Prerequisite: Basic concepts of Management

COURSE OVERVIEW:

Statistical Packages for Data Analysis (MS Excel / SPSS) is designed to equip first-year MBA students with practical and analytical skills for data-driven decision-making. The course focuses on the effective use of MS Excel and SPSS to organize, analyze, and interpret business data. It covers data management, data visualization, descriptive statistics, correlation and regression analysis, hypothesis testing, statistical inference, time series forecasting, and decision-making tools using real business datasets. By the end of the course, students are able to independently perform data analysis, interpret statistical results, and apply appropriate statistical techniques to support managerial decisions in Marketing, Finance, HR, Operations, and Supply Chain.

COURSE OBJECTIVES:

1. To impart knowledge on the functions and features of MS Excel and SPSS for data analysis.
2. To develop skills in organizing, formatting, and manipulating data using templates and tools in Excel/SPSS.
3. To enable students to analyze and visualize data using charts, graphs, tables, pivot tables, and pivot charts.
4. To demonstrate the application of statistical tools such as correlation, regression, and measures of central tendency and dispersion.
5. To provide understanding of statistical hypothesis testing techniques for effective data-driven managerial decisions.

COURSE OUTCOMES: After Completion of the course, students should be able to

- Identify and explain the functions and features of MS Excel and SPSS for statistical analysis.

- Apply data management and formatting techniques using templates and tools in Excel/SPSS.

- Analyze business data using charts, graphs, pivot tables, pivot charts, and statistical functions

- Select and justify appropriate statistical tools and techniques such as correlation, regression, and measures of dispersion.
- Evaluate and interpret results of statistical tests such as t-test, ANOVA, Chi-square, F-test, and forecasting models for managerial decision-making.

Unit – I: Introduction to Statistical Packages: MS – EXCEL or SPSS: Introduction, Uses, Functions and Features of Statistical Packages, getting started with Excel/SPSS, Highlights and Main Functions: Home, Insert, Page Layout, Formulae, Data, Review, View, Add-inns, Using Help Function, Customizing the Quick Access Toolbar.

Unit – II: Creating and Using Templates: Working with Data: Entering, Editing, Copy, Cut, Paste, Paste Special, Formatting Data and Using the Right Mouse Click, Saving, Page Setup, and Printing, Using Headers and Footers, Manipulating Data, Using Data Names and Ranges, Filters and Sort and Validation Lists.

Unit – III: Data from External Sources: Using and Formatting Tables, Basic Formulae and Use of Functions, Data Analysis Using Charts and Graphs, Managing, Inserting, and Copying Worksheets, Securing the Document, Advanced Formulae and Functions, Worksheet Features, Data Analysis using Pivot Tables and Pivot Charts.

Unit –IV: Data Analysis – I: Tabulation, Bar Diagram, Multiple Bar Diagram, Pie Diagram, Measures of Central Tendency: Mean, Median, Mode. Measures of Dispersion: Variance, Standard Deviation, Coefficient of Variation, Correlation and Regression Lines.

Unit –V: Data Analysis – II: t-test, F-test, ANOVA One-way classification, Chi-square Test, Independence of attributes. Time series: Forecasting Method of Least Squares, Moving Average Method, Inference and Discussion of Results.

TEXT BOOKS:
1. R. Panneerselvam, Business Statistics Using MS Excel, Sage Publications, 2022.
2. Glyn Davis, Branko Pecar, Business Statistics Using Excel, Oxford University Press, 2e, 2014.
3. D P Apte: Statistical Tools for Managers USING MS EXCEL, Excel, 2012.
4. David M Levine, David. F. Stephan & Kathryn A. Szabat, Statistics for Managers – Using MS Excel, PHI, 2015.

REFERENCE BOOKS:

1. Business Statistics in Practice – Bruce Bowerman, TMH, 5th Edition, 2012.
2. Statistical Methods for Practice and Research – Ajai S. Gaur & Sanjaya S. Gaur, Response

Books, 2009.

ELECTRONIC RESOURCES:

1. Microsoft – Official Excel Support and Learning Portal (Excel tutorials, templates, functions guide)
2. IBM – SPSS Documentation and User Manuals
3. NPTEL – Online courses on Business Statistics and Data Analysis
4. SWAYAM – Statistical Methods and Excel-based courses
5. Coursera – Data Analysis and Business Statistics courses
6. YouTube – Excel and SPSS tutorial channels

MATERIALS ONLINE:

1. Open-ended experiments
2. Lab Manuals