



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

COURSE CONTENT

HR ANALYTICS								
IV SEMESTER								
Course Code	Category	Hours/Week			Credits	Maximum Marks		
22MBA027H	ELECTIVE	L	T	P	C	CIE	SEE	Total
		4	0	-	4	40	60	100
Contact Classes:60	Tutorial Classes: Nil	Practical Classes: Nil			Total Classes: 60			
Prerequisite: Basic concepts of Human resources and Analytics								

COURSE OVERVIEW:

This course is designed to help students as an emerging and highly relevant field that integrates human resource management with data analysis and evidence-based decision making. The course is designed to provide students with conceptual understanding as well as practical skills required to analyze workforce data, interpret HR metrics, and support strategic decision-making in organizations.

COURSE OBJECTIVES:

- To explain the evolution of HRM to HR Analytics and its role in achieving business outcomes.
- To introduce HR analytics models, data types, and data preparation methods.
- To demonstrate how MS Excel is used for analyzing key HR functions.
- To provide an overview of tools for descriptive and diagnostic HR analytics.
- To introduce predictive and prescriptive techniques and tools in HR analytics.

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

1. Explore HR Analytics, evolution, importance, scope and connection to business outcomes in the big data era
2. Explain models & methods for conducting HR analytics, types of HR data, scales of measurement, methods for capturing and cleaning HR data.
3. Apply HR analytics techniques, exercising MS Excel across HR functions, recruitment, training, performance appraisal, employee engagement and compensation management
4. Analyze HR data using descriptive analytics tools and create dashboards for interpreting - visualizing key HR metrics & trends.
5. Evaluate workforce trends, recommend solutions using predictive and prescriptive analytic techniques .

Unit – I: Introduction to HR Analytics: History of Different HRM Perspectives, Transition from HRM to HCM and Gaining Sustainable Advantage through HCM. HR Analytics and Changing Role of HR Professionals. Importance and Scope of HR Analytics. Significance of HR Analytics, Benefits

of HR Analytics. Four Levels of Analysis: Descriptive, Diagnostic, Predictive and Prescriptive. Key Influencers of HR Analytics Process. Big Data Era in HR Analytics, HR Analytics – Linkage to Business Outcomes.

Unit – II: Understanding HR Analytics: Conducting HR/Workforce Analytics: Models of HR Analytics: LAMP Model, HC Bridge Model, Bersin’s HR Analytics Maturity Model and HR Value Chain Model. Process of conducting HR Analytics. Understanding HR Data: Importance of Data, Types and Scales of Data; Methods of Capturing Data, Data Examination & Purification. Understanding various HR Metrics from the perspective of HR Analytics.

Unit – III: Analytics for Key HR Processes Using MS Excel: Conduction of HR Analytics for key metrics under HR Processes viz. (i) Recruitment & Selection, (ii) Training & Development, (iii) Performance Appraisal, (iv) Talent Management, (v) Employee Engagement, (vi) Compensation Management and (vii) Expatriate Management.

Unit – IV: Descriptive & Diagnostic HR Analytics: Overview of Select Tools for Conduction HR Analytics: (i) Statistical tools: MS Excel, SPSS & PSPP; (ii) Programming Languages: R & Python; (iii) Visualization Tools: MS Excel, Tableau & Power BI. Descriptive Analytics in HR: HR Dashboards using MS Excel, Slicing and Dicing of HR Data using MS Excel Pivot Table Applications. Data Visualization for Key HR processes. Introduction and scope of diagnostic HR analytics, descriptive vs diagnostic analytics, basic diagnostic techniques: root cause analysis, hypothesis testing for chi square, correlation analysis and regression.

Unit – V: Predictive & Prescriptive HR Analytics: Predictive HR Analytics: Correlation, Linear and Multiple Regression, Factor Analysis and Cluster Analysis, Comparison of Means and Analysis of Variance for Manpower Demographics, Employee Satisfaction, Training Effectiveness etc. Prescriptive HR Analytics, Predictive vs. Prescriptive HR Analytics, Tools for conduction of prescriptive analysis: Decision Trees and What-If Scenarios. Future of HR Analytics.

TEXT BOOKS:

- Rama Shankar Yadav & Sunil Maheshwari, HR Analytics, Wiley, 2021.
- Pratyush Banerjee, Jatin Pandey & Manish Gupta, HR Analytics: Practical Applications of HR Analytics, Sage, 2019.
- Swati Dhir & Suparna Pal, Human Resource Analytics: Theory and Application Techniques, Cengage, 2021.

REFERENCE BOOKS:

- Dipak Kumar Bhattacharya, HR Analytics, Sage, 2017.
- Ramesh Soundrarajan & Kuldeep Singh, Winning on HR Analytics, Sage, 2017.
- Nishant Uppal, Human Resource Analytics, Pearson, 2021

ELECTRONIC RESOURCES:

1. <https://www.shrm.org/in/enterprise-solutions/enterprise-bask/people/learning-and-development>

2. <https://www.innomatics.in/free-hr-analytics-training>
3. <https://iirfranking.com/online-courses/course-details/hr-analytics-course>
4. <https://www.aihr.com/hr-resources/hr-dashboard-practice-dataset-tutorial-excel>

MATERIALS ONLINE:

1. Course template
2. Tutorial question bank
3. Tech talk and Concept Video topics
4. Open-ended experiments
5. Definitions and terminology
6. Assignments
7. Model question paper – I
8. Model question paper – II
9. Lecture notes
10. PowerPoint presentation
11. Drishya Siksha Sangrah (DSS) Videos

