Mandatory Course 2: HR Analytics

Course Type:	SE: Skill Enhancement Course	Course Credits:	4
Course Code:	H3SE508	Course Duration:	60 hours

Course Objective:

- To introduce foundational concepts and methodologies in human resource analytics.
- To equip students with analytical skills for interpreting HR data and metrics for informed decision-making.
- To demonstrate practical applications of predictive analytics in workforce planning and talent management.
- To train students in leveraging analytics tools for performance management and employee engagement.
- To critically assess ethical and privacy concerns associated with HR analytics implementation.

Course Outcomes:

- CO1: Understanding the basics of Analytics and HR Analytics, Relation of HR Analytics with HR strategies, learning different categories of HR Analytics.
- CO2: Applying HR Analytics to facilitate decision making in organizations.
- CO3: Analysing the business environment and use HR Analytics for various HR Functions.
- CO4: Evaluating the impact of HR Analytics in resolving business challenges.
- CO5: Applying analytics in employee performance, employee engagement, employee turnover, assessing diversity
- CO6: Understanding different advanced HR Analytic Techniques, ethical ways to use AI and enhance organization effectiveness.

Unit / Module	Content	CO Mapping	Hours Assigned
1	**Introduction to Analytics:** ● Evolution of Analytics ● Need for Analytics in Business ● Introduction to HR Analytics and link to organizational goals	CO1	4

2	**Matrices and Analytics** ● Terminology of Matrices and Analytics ● Descriptive Analytics ● Prescriptive Analytics ● Predictive Analytics ● Models in HR Analytics.	CO1, CO2	8
3	**HR Information Systems and Data** ● Information Sources ● Analysis software options ● Preparing data: Using SPSS Big Data	CO2, CO1	5
4	**Analysis Strategies** ● Descriptive reports to predictive analytics ● Statistical Significance: Types of data ● Types of statistical tests: Factor Analysis, Reliability & Validity Analysis, SEM etc.	CO2, CO3	6
5	**Recruitment and Selection Analytics** ● Reliability and validity of selection process ● Human bias in recruitment and selection ● Predicting Employee Performance ● Indicators of Performance Methods for Measuring Performance	CO3, CO4	6
6	**Predicting Employee Performance** ● Indicators of performance: Methods for measuring performance	CO3, CO4, CO5	4
7	**Employee Engagement and Workforce Perceptions** ● Measuring Employee Engagement: Interrogating the measures ● Conceptual Explanation of factor analysis	CO4, CO5	4
8	**Predicting Employee Turnover** ● Relevance of employee turnover as an HR indicator ● Descriptive Turnover Analysis: Measuring and exploring differences between	CO5, CO4	8

	turnover at an individual and team level
	● Equality, diversity and inclusion:
	  Approaches to measuring and
	  managing D&I		

9	**Monitoring the Impact of Interventions** ● Tracking the impact of various HR interventions	CO3, CO4, CO5	3

10	**Diversity Analytics**
	● Equality, diversity and inclusion:
	  Approaches to measuring and managing
	  D&I
			4

11	**Advanced HR Analytic Techniques I**
	● Mediation Processes: Moderation and
	  interaction analysis: multi-level linear
	  modelling: Curvilinear relationships
	● **Advanced HR Analytic Techniques II**
	  Structural Equation Models: Growth
	  Models: Latent class analysis: Response
	  surface methodology and polynomial
	  regression
		CO5, CO6	5

12	**Ethics in Analytics:** ● Ethical Standards for HR Analytics Limitations of AI	CO6	3

Textbooks:

1. The New HR Analytics: Predicting the economic value of your company's human capital investment: Jac Fitz-enz

2. HR Analytics: The What, Why and How: Tracey Smith

3. HR Analytics Understanding Theories and Applications Dipak Kumar Bhattacharya Sage

4. Practical Applications of HR Analytics Pratyush Banerjee, Jatin Pandey, Manish Gupta Sage

Reference Books:

1. Predictive HR Analytics: Mastering the HR Metric: Dr. Martin R. Edwards,