

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-641 **Course Title:** Human Resource Analytics
2. **Contact Hours:** **L:** 3 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 2 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 1.5 **6. Term:** IV/V/VI/VII
7. **Pre-requisite:** Nil **8. Subject Area:** PEC
9. **Objective:** To discuss use of predictive analytical techniques in the hiring and effective management of workforce management, and illustrates design and implementation of strategies in a competitive business.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Introduction to human resource analytics: HR Decision making and HR Analytics, Concepts, definition, importance, and benefits of HR analytics. Steps to implement HR Analytics. Critical HR decision making and HR Analytics, HR analytics and changing role of HR managers	3
2.	Aligning human resources to business through HR Analytics: Alignment of HR Analytics with Business Goals and Strategies, Application of HR and Predictive Analytics, HR Analytics Frameworks and Models	3
3.	HR Business process and HR Analytics : Statistics and Statistical Modelling for HR Research and HR Decision making, HR Research tools and Techniques, Data analysis for Human Resources, Parametric and Non-parametric Tests	3
4.	HR Analytics for Decision making: HR Metrics, Recruitments Metrics, Metrics for Training and Development Functions, HR Scorecard, HR Dashboards, HR Analytics as a Better tool for HR Decisions	3
5.	HR Value propositions with HR Analytics: Value proposition and HR Decisions, HR Analytics and HR Value Propositions, HR Optimisation through HR Analytics, HR Forecasting, HR Plan and HR Analytics, Predictive HR Analytics	3
6.	HR Analytics and Data: HR Data and Data Quality, HR Data collection, Big Data for Human Resources, Transforming HR Data into Information, Process of Data Collection for HR Analytics, Data Collection for Effective HR Measurement, HR Reporting	3
7.	HR Analytics Predictive Modelling : Different phases of HR Analytics or HR Predictive Modelling, Examples of Predictive Analytics, Data and information for HR Predictive Analysis, Predictive Analytics Tools and Techniques, Scenario modelling and business cases, Predictive modelling scenarios, Modeling the potential impact of a training program	3
Total		21

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Martin R. Edwards and Kirsten Edwards, Predictive HR Analytics: Mastering the HR Metric. Kogan Page.	2016
2.	Dipak Kumar Bhattacharya, HR Analytics: Understanding Theories and Applications, Sage Publications.	2017
3.	Jack Fitz-enz, The New HR Analytics: Predicting Economic Value of Your Company's Human Capital Investments	2010
4.	Jean Paul Isson and Jesse S. Harriott, People Analytics in the Era of Big Data: Changing the Way You Attract, Acquire, Develop, and Retain Talent. Wiley.	2016
5.	HBR Guide to Data Analytics Basics for Managers: Understand the numbers, Make better decisions, Present and persuade, Harvard Business Review Press	2018