



HR ANALYTICS

23MBPE692

(COURSE HANDBOOK)

MBA

COURSE HEAD:

Asst. Prof. Ms Ramya Bharadwaj

1. GENERAL INFORMATION

Welcome to HR Analytics!

This course serves as a foundational exploration of key HR Analytics concepts and their practical applications in organizational environments. It is designed to equip aspiring HR professionals with the knowledge and skills needed to harness the power of data and analytical techniques for effective decision-making and strategic HR solutions.

The curriculum is structured into five comprehensive modules, each building upon the previous one. You will begin with an introduction to the role of HR Analytics and its value creation within organizations. This is followed by an in-depth exploration of predictive HR analytics, including identifying key HR performance indicators, regression analysis, and forecasting models. The course then covers advanced HR frameworks, such as scorecards and maturity models, providing structured approaches to measuring and enhancing HR contributions.

You will also gain insights into data-driven HR analytics, from sourcing and cleaning data to connecting analytics with business outcomes. The final module focuses on HR metrics and scorecards, emphasizing the creation of meaningful dashboards and the ethical use of HR data for performance evaluation and strategic decision-making.

As you progress through the course, you will be encouraged to actively participate in discussions and collaborative projects. These activities will not only deepen your technical comprehension but also foster essential skills such as analytical thinking, problem-solving, and teamwork. We emphasize a practical approach to learning; therefore, you will be expected to undertake data-driven exercises, case studies, and reflective tasks that align with the course content.

We hope this course will not only provide you with analytical expertise but also inspire you to apply HR insights strategically in your future careers. Please familiarize yourself with this handbook, as it contains vital information regarding assessments, learning outcomes, and resources to support your academic journey. We look forward to an engaging and productive semester together!

1.1.Course Objectives

This course is designed to:

- **Impart knowledge on the fundamental concepts and significance** of HR Analytics.
- **Familiarize students with HR frameworks** to measure and enhance HR performance.
- **Provide an overview of data-driven HR insights** for achieving organizational benefits.
- **Familiarize students with predictive HR analytics skills** to support data-driven decision-making.

1.2. Course Outcomes

- **CO1:** Summarize the basic concepts of HR data analytics
- **CO2:** Apply HR Analytics for data-driven decision-making.
- **CO3:** Apply predictive HR models for interpreting the results and predicting the future.
- **CO4:** Summarize HR metrics and HR Scorecards to optimize human capital.

1.3. Set Text and Suggested Sources

All the below mentioned books are available in the 1st Floor Library.

Key Text Books:

1. Jac Fitz-enz, John R. Mattox, “Predictive analytics for Human Resources”, 2nd Edition, Wiley, 2014.
2. Gene Pease Boyce Byerly, Jac Fitz-enz, “Human Capital Analytics”, 1st Edition, Wiley, 2013.

Reference Books:

1. Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001.
2. Jac FITZ-ENZ, “The New HR Analytics: Predicting the Economic Value of Your Company's Human”, 1st Edition, 2010

2. THE COURSE

2.1.Course Description

HR ANALYTICS			
Semester	IV	CIE Marks	50
Course Code	23MBPE692	SEE Marks	50
Teaching Hrs/Week (L:T:P)	3:0:0	Exam Hrs	03
Total Hrs	42	Credits	03

The HR Analytics course is designed to provide students with a comprehensive understanding of data-driven decision-making processes in human resource management. The course will run for 13 weeks during Semester 1 and consists of 5 modules that cover key topics such as workforce planning, talent acquisition, employee engagement, performance management, and predictive analytics in HR. Each week includes 3 lectures, delivered by Ms. Ramya Bharadwaj, focusing on theoretical concepts, hands-on exercises, and case studies from HR practices. Spanning a total of 42 hours, this 3-credit course is assessed through Continuous Internal Evaluation (CIE) for 50 marks and a Semester-End Examination (SEE) for 50 marks, with a 3-hour exam duration. This structure ensures an engaging and balanced learning experience for students, blending analytical insights with practical HR applications.

2.2. Initiating Contact with Staff and Other Students

Students are encouraged to use class hours for inquiries and are welcome to visit the faculty office for additional support. Given the large class size, emailing is also an effective communication option.

2.3. Resources

Resources go beyond just books—they include dynamic tools like digital libraries, e-learning platforms, and research databases. These modern learning environments offer anytime, anywhere access to academic materials, interactive courses, and cutting-edge research, empowering students to explore knowledge and excel in their fields.

Students can access a variety of resources through the college website. These include the VTU Consortium, e-learning platforms, and additional sources like open-access repositories, government portals (e.g., NPTEL, NDLI). These digital tools provide access to e-books, research papers, video lectures, and interactive tutorials, offering flexible and comprehensive learning environments.

E-learning and digital library can be accessed via the college website <https://mite.ac.in/> (Campus Life section > Library > VTU Consortium/e-learning platforms/additional sources).

2.4. Staff

Course Convenor: Prof. Ramya Bharadwaj
Cabin: 3rd floor, PG Block
Email: Suchithra@mite.ac.in

2.5. Topics and Reading materials for each module

Module 1

No. of Hours: 08

- **Topic: HR Analytics in Perspective**
 - Basics of HR Analytics, Role of Analytics, Analytical capabilities, Analytic value chain, Analytical Model, Typical application of HR analytics. HR Analytics: The Third Wave for HR value creation, HR Measurement journey in tune with HR maturity journey, Lean organizational system, locating the HR challenge in the system, Valuing HR Analytics in the organizational system.
- **Activities:**
 - Students will map the HR analytics value chain and identify key HR processes in an organization. They will explore analytical capabilities and discuss how HR analytics creates organizational value. This activity helps students understand the third wave of HR value creation. It also connects HR challenges to lean organizational systems.
- **Essential Readings:**
 - Jac Fitz-enz, John R. Mattox, “Predictive analytics for Human Resources”, 2nd Edition, Wiley, 2014. (Chapter 1)

- **Additional Reading:**
 - Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001. (Chapter 1)

Module 2

No. of Hours: 08

- **Topic: Predictive HR Analytics**
 - Steps involved in predictive analytics: Determine key performance indicator, analyze and report data, interpreting the results and predicting the future. Metrics and Regression analysis and Causation.
- **Activities:**
 - Students will identify key HR performance indicators and apply regression analysis to sample data. They will analyze data to establish causation and make future predictions. The activity enhances skills in interpreting analytics results for better HR decisions. Students present insights to predict trends like employee turnover.
- **Essential Reading:**
 - Jac Fitz-enz, John R. Mattox, “Predictive analytics for Human Resources”, 2nd Edition, Wiley, 2014. (Chapter 6 and 7)
- **Additional Reading:**
 - Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001. (Chapter 6)

Module 3

No. of Hours: 09

- **Topic: HRA Frameworks**
 - Current approaches to measuring HR and reporting value from HR contributions, Strategic HR Metrics versus Benchmarking, HR Scorecards & Workforce Scorecards and how they are different from HR Analytics, HR Maturity Framework: From level 1 to level 5, HR Analytics Frameworks: LAMP, HCM:21 and Talent ship.
- **Activities:**
 - Students will design an HR scorecard for a hypothetical organization. They will identify strategic metrics and differentiate between HR Scorecards and Workforce Scorecards. This activity involves exploring frameworks like LAMP and HCM:21. It strengthens understanding of measuring and reporting HR contributions.
- **Essential Reading:**
 - Gene Pease Boyce Byerly, Jac Fitz-enz, “Human Capital Analytics”, 1st Edition, Wiley, 2013. (Chapter 3, 4 and 5)
 - Jac Fitz-enz, John R. Mattox, “Predictive analytics for Human Resources”, 2nd Edition, Wiley, 2014. (Chapter 2)
- **Additional Reading:**
 - Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001. (Chapter 2)

Module 4*No. of Hours: 08*

- **Topic: Insight into Data Driven HRA**
 - Data sources, data issues, Connecting HR Analytics to business benefits, Techniques for establishing questions, Building support and interest, obtaining data, Cleaning data (exercise), Supplementing data.
- **Activities:**
 - Students will clean sample HR datasets, identifying errors and handling missing data. They will analyze the cleaned data and generate actionable insights. The activity emphasizes data preparation techniques for meaningful analysis. Students also learn how to connect HR analytics findings to business benefits.
- **Essential Reading:**
 - Gene Pease Boyce Byerly, Jac Fitz-enz, “Human Capital Analytics”, 1st Edition, Wiley, 2013. (Chapter 3 and 4)
 - Jac Fitz-enz, John R. Mattox, “Predictive analytics for Human Resources”, 2nd Edition, Wiley, 2014. (Chapter 4)
- **Additional Reading:**
 - Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001. (Chapter 4 and 5)

Module 5*No. of Hours: 09*

- **Topic: HR Metrics & Scorecard**
 - HR Metrics – Defining metrics, Demographics, data sources and requirements, Types of data, tying data sets together, Difficulties in obtaining data, ethics of measurement and evaluation. Human capital analytics continuum, HR Dashboards, Tools for HR analytics. HR Scorecard: Assessing HR Program, engagement and turnover, linking HR data to operational performance, HR Data and stock performance. Creating HR Scorecard, develop an HR measurement system, guidelines for implementing a HR Scorecard.
- **Activities:**
 - Students will define key HR metrics and create an interactive HR dashboard. They will use tools like Excel or Tableau to visualize data. The activity involves analyzing how HR metrics relate to operational performance. Students will present insights and link HR data to business outcomes.
- **Essential Reading:**
 - Gene Pease Boyce Byerly, Jac Fitz-enz, “Human Capital Analytics”, 1st Edition, Wiley, 2013. (Chapter 5)
- **Additional Reading:**
 - Brian E. Becker, Mark A Huselid David Ulrich “The HR Scorecard: Linking People, Strategy, and Performance”, 2001. (Chapter 3 and 8)

3. ASSESSMENT

The assessment for the HR Analytics is divided into two components: Continuous Internal Evaluation (CIE) and Semester End Examination (SEE), each accounting for 50% of the total marks.

Continuous Internal Evaluation (CIE) comprises two internal tests, scheduled for 8th and 13th week, which together contribute 30% of the total marks. Additionally, students can earn 20% through the completion of assignments. (10 marks is allotted for Predictive HR Analytics and 10 marks is allotted for HRA Frameworks & Scorecard Design)

Semester End Examination (SEE) constitutes the remaining 50% of the total marks. Key information regarding examination dates and related details can be accessed via the college website (Academics and Courses section > Calendar of Events > PG Even Sem).

Rubrics for Other Assessment (Total: 20 Marks / 40% of CIE)

1. Predictive HR Analytics (10 Marks)			
Criteria	Excellent (10 - 7, Marks)	Good (6 - 3, Marks)	Needs Improvement (2 – 0, Marks)
KPI Identification & Regression Analysis	KPIs are well-defined, and regression analysis is accurately applied with meaningful insights.	KPIs are identified with partially correct regression analysis and relevant insights.	KPIs are unclear, with inaccurate regression analysis and weak insights.

2. HRA Frameworks & Scorecard Design (10 Marks)			
Criteria	Excellent (10 - 7, Marks)	Good (6 - 3, Marks)	Needs Improvement (2 – 0, Marks)
Scorecard Design & Framework Application	Scorecard is comprehensive and aligned with strategic objectives; frameworks are effectively applied.	Scorecard is adequately designed, with partial application of frameworks.	Scorecard is incomplete, with limited or no application of frameworks.