

EXECUTIVE PROGRAMME IN BUSINESS ANALYTICS & BUSINESS INTELLIGENCE (EPBABI)

ONE-MONTH WEEKEND PROGRAMME FOR EXECUTIVES AND FACULTY MEMBERS

*(Classes to be conducted on **Saturdays and Sundays**
with an option for **classroom or online** sessions)*

ABOUT IIM RANCHI

Indian Institute of Management Ranchi (IIM Ranchi) is a premier management institute of the country, the ninth Indian Institute of Management and was established at Ranchi in 2010. This was made possible with the extensive support of Ministry of HRD, Government of India and the Government of Jharkhand. IIM Ranchi is providing high quality education in the area of Management. IIM Ranchi currently offers a two year MBA Programme in General Management, which is our flagship programme. Going by the growing importance and indispensability associated with human resources, we are also offering a full-time two year programme in Human Resources Management (MBA-HRM). We also offer Ph.D Programme funded by the government and Executive MBA for working executives. Our programs are carried out in a world-class fashion with students being exposed to case-studies, relevant projects and relevant industry experience apart from class pedagogy. We have also launched Certificate Programme in General Management (CPGM) for working executives and Executive Ph.D program recently. IIM Ranchi has always given special thrust in business analytics right from its inception.

In-order to keep the executives abreast of latest developments in management for their overall improvement, it is imperative to have Management Development Programmes (MDPs) for the working executives which give scope and opportunity for interactions between Industry and Academia. Accordingly, IIM Ranchi has conducted Management Development Programmes as well as In Company Programmes for Organizations like Powergrid Corporation of India Ltd, Export Credit Guarantee Corporation of India Ltd (ECGC), NTPC-Coal mining, Damodar Valley Corporation of India Ltd (DVC), Indian Oil Corporation of India Ltd (IOCL), Life Insurance Corporation Ltd, Mahindra Finance, Jharkhand Bijli Vitran Nigam Ltd (JBVNL), Department of Public Enterprise- Government of India, Department of Forest- Government of Jharkhand, Department of Industries- Government of Jharkhand, Shri Krishna Institute of Public Administration- Government of Jharkhand in different functional areas like OB & HR, Finance & Accounting, Marketing Management, Operation Management, Strategic Management, Information system etc . Most of the courses were conducted at Ranchi with duration of 5 days. IIM Ranchi has been conducting MDPs in business analytics and EPBABI since 2012.

Introduction of EPBABI

Executive Programme in Business Analytics & Business Intelligence (EPBABI) runs as management development programme in analytics. EPBABI is **one-month weekend** programme for a duration of 8 days within a period of one month.

The sessions will be conducted in IIM Ranchi. If any participant is not able to attend the sessions physically in IIM Ranchi, he/she may attend online.

There will be 6 hours of sessions on each day.

The programme aims to prepare participants for careers that apply and manage modern data science to solve critical business challenges. With the growing importance of business analytics, the demand for talents to analyse and demystify data is in increasing demand. The program has been designed to impart in-depth knowledge on modelling the business problems and on using the tools and techniques of analytics to make the participants capable of playing a leading role in this evolving field. It is structured to enable the participants to define business and other real-life problems, use analytical tools and techniques to identify patterns, gain insights, develop business strategies and make sound management decisions.

Objectives of the Programme

The primary objectives of this programme are:

- a. To make the participants understand the necessary principles of different forms of analytics (descriptive, predictive and prescriptive) to facilitate decision-making in practical business settings.
- b. To enable the participants to acquire and use advanced analytical as well as managerial skills to evaluate uncertain and dynamic business environment and to make effective decisions.

Indicative Course Content of the Programme

Day	Sessions
Day 1	Introduction to Business Analytics & Business Intelligence
	Statistics for Analytics: Descriptive Statistics
	Statistics for Analytics: Hypothesis Testing
	Statistics for Analytics: ANOVA, MANOVA, DoE
	Machine Learning and Data Mining: Introduction
	Machine Learning and Data Mining: Association Rule
Day 2	Machine Learning and Data Mining: Classification and Clustering
	Introduction to R
	Using R for Predictive Analytics: Decision Tree, Neural Network
	Using R for Predictive Analytics: KNN, SVM
	Operations Research: LPP
	Operations Research:LPP
Day 3	Introduction to Python
	Using Python for Analytics
	Using Python for Analytics
	Using Python for Analytics
	Using R for Analytics: Market Basket Analysis for Predictive Modelling
	Using R for Analytics: Segmentation Model for Classification
Day 4	Introduction to Text Mining
	Concepts of Stemming, Lemmatization, TF-IDF Matrix
	Prediction using TF-IDF
	Operations Research: Transportation and Assignment Problems
	Operations Research: Non-Linear Programming
	Operations Research: Non-Linear Programming
Day 5	Introduction to NLP
	Text Mining and NLP
	Word Cloud using R
	Sentiment Analysis using R
	Supply Chain Analytics
	Supply Chain Analytics
Day 6	Social Media Analytics
	Analysing Social Media Content

	Analysing Social Media Content with R
	Analysing Social Media Content with R
	Artificial Neural Network & Deep Learning
	Artificial Neural Network & Deep Learning
Day 7	Social Network Analytics Lab (Gephi)
	Social Network Analytics Lab (Gephi)
	Analysing Social Media Content with Python
	Marketing Intelligence: BI in Marketing
	Analytics in Business Process Improvement
	Analytics in Business Process Improvement
Day 8	Analytics in Business Process Improvement
	Analytics in Business Process Improvement
	Marketing Analytics: Pricing and Revenue Management
	Marketing Analytics: Pricing and Revenue Management
	Marketing Analytics: Allocation on Resources and Advertisement
	Marketing Analytics using Solver

Pedagogy

The courses would be taught on participation mode using the following methods

- Lectures
- Hands-on-experience in R, Python, SPSS Modeller, IBM Cognos, Tableau
- Case Analysis

Programme Completion Certification

All the students participating in at least 80% of the sessions will be eligible for programme completion certificate of EPBABI.

Programme Fee Structure

With reference to the fee structure, the total fee for the programme is **Rs 80,000+ GST** as applicable

This includes the tuition fee, course material and program kit. This does not include the travel, boarding and lodging expenses which are to be borne by the participants.

The above mentioned fee structure is not inclusive of accommodation and food. The candidates have to arrange their own accommodation during the visits. The EPBABI office shall provide the address and contact details of the good hotels located near the institute campus. The participants who need assistance in locating a good hotel may contact the EPBABI office.

Programme Directors and Faculty Details

Programme Directors

Prof. Pradip Kumar Bala
Professor, Information Systems & Business Analytics

Prof. Nitin Singh
Professor, Information Systems & Business Analytics

Faculty Details

Dr. Pradip Kumar Bala, Professor in the area of Information Systems & Business Analytics, holds Ph.D., M.Tech. and B.Tech.(Hons.), all from IIT, Kharagpur. His teaching and research spans over the topics like data mining, text mining & NLP, deep learning, recommender systems, social media analytics and marketing analytics. Prior to academics, he was working in TATA Steel, Jamshedpur. In IIM Ranchi, he has conducted many executive programs in business analytics and business intelligence (EPBABI) for corporate executives. He has published research papers in the business application of data mining, data mining algorithm, recommender systems, text, web and social network analytics. He has published more than 75 research papers in reputed international journals published by Elsevier, Springer, Taylor & Francis, Emerald, Wiley etc., conference proceedings and edited books. He has supervised six Ph.D. students in IIM Ranchi and many other full-time and executive doctoral students are working under his supervision. More details of his achievements and publications are available in the faculty page of IIM Ranchi website.

Dr. Nitin Singh is Professor of Information Systems & Business Analytics at IIM Ranchi. He had been employed previously with KPMG, Hexaware, Boston Analytics, GE Capital, IIM Indore & HPCL. Nitin has published in International prestigious journals (listed in ABS & ABDC) published by Blackwell, Wiley, Taylor & Francis, ACM, IEEE, Atlantis & Thomson Reuters. His industrial experience is in data analytics, big data & forensic analytics. Nitin has been a visiting researcher with Hong Kong Poly University for several years. He holds a PhD from IIM Bangalore and was Aditya Birla doctoral scholar at IIM Bangalore during his doctoral studies. He holds experience in working with technologies like Python, SAS & SQL Server and is certified SAS programmer from the SAS Institute, USA. He is a reviewer for Journal of Global Information Management, Computers & Industry & other such prestigious journals.

Other Details

The Programme is to be conducted in September-2020.

For any further information, please visit: www.iimranchi.ac.in

For any query on admission, please email to office.cmdp@iimranchi.ac.in with cc to the programme directors, Prof. Pradip Kumar Bala (pkbala@iimranchi.ac.in) and Prof. Nitin Singh (nitin.singh@iimranchi.ac.in).