



# INDIAN INSTITUTE OF MANAGEMENT CALCUTTA



## BUSINESS ANALYTICS FOR STRATEGIC AND TACTICAL LEVEL DECISION MAKING



**Programme Directors: Prof. Saibal Chattopadhyay  
& Prof. Uttam Kumar Sarkar**



**Programme Dates: December 16 - 20, 2024**



**Programme Venue: MDC, IIM Calcutta**

## INTRODUCTION

Myths and promises surrounding Business Analytics galore. Success and failure stories of analytics ventures are visible across organizations. Real experts as well as self-styled experts keep sermonizing about the subject. The uninitiated get confused if it is a panacea, yet another hype, or something that requires informed attention. The reality is confounding to senior people, especially to those involved in tactical and strategic level decision making who have understandably not been formally trained in this emerging field. The result is the dilemma if they are treating the subject with the consideration it deserves, particularly, if they are overdoing the promises or myths surrounding the subject.

The programme will be delivered over five days, through a mix of lectures, interactions, and hands-on demonstration using software tools. The proposed schedule of the sessions is given.

## OBJECTIVES

Given the nature of the subject, expertise development for the operational and tactical level requires a sound understanding of statistics, modern information-communication-computation technology, principles and practices of management, and some business domain expertise as prerequisites. Top and middle level management executives at strategic and tactical levels often may not possess all these skills and this ground reality often paves ways for misunderstandings about the subject leading to unwarranted expectations or missed opportunities caused by ignorance. This programme is meant for middle and top-level decision makers operating at tactical and strategic levels.

The objective is to sensitize the participants about the myths, promises, and realities surrounding business analytics to help them appreciate the potentials and limitations of analytics applications in their own organization.



## PEDAGOGY

Interactive sessions, examples and case studies, hands-on demonstration using simple software tools.



## WHO MAY ATTEND

Middle level and senior level managers involved in tactical and strategic decision making in any organization caring for data-driven and data-aided decision making.



## KEY TOPICS

- Success and failure case studies of business analytics
- Statistical ways in aiding business decisions under uncertainty
- Artificial intelligence and machine learning approaches in shaping business decisions
- Regression analytics
- Forecasting analytics
- Artificial neural networks and deep learning in aiding business decisions
- Structural analytics and organizational power and control
- Networking effects in compounding difficulties of managers in decision making
- Emerging areas in predictive analytics in business context, Generative AI



## PROGRAMME DIRECTORS

**Prof. Saibal Chattopadhyay** is a Statistician and is with the Operations Management Group of the institute since 1997. He had earlier been a faculty at the Presidency College Calcutta, University of Connecticut, Stamford, USA, and at University of Nebraska, Lincoln, U.S.A. He is an M.Sc. in Statistics from the Calcutta University, and M.S. & Ph.D in Statistics from the University of Connecticut, Storrs, U.S.A. His current teaching and research areas include Statistical Methods in Business, Sequential Estimation, Finite Population Sampling, and Environmental Monitoring. He has published his research in leading international journals and conference proceedings. He can be reached by email at [chattopa@iimcal.ac.in](mailto:chattopa@iimcal.ac.in).

**Prof. Uttam Kumar Sarkar** is with the Management Information Systems Group of the Institute since 1997. He had earlier worked in multinational software firms, as a faculty at I.I.T. Delhi, and as a faculty at the University of Miami, Florida, USA. He is a B.Tech, M.Tech, and Ph.D in Computer Science and Engineering from I.I.T. Kharagpur. His current teaching and research interests include Business Data Mining, Social Networking Analysis, and Sponsored search market behaviour. He has published his research in leading international journals and conference proceedings. He can be reached by email at [uttam@iimcal.ac.in](mailto:uttam@iimcal.ac.in).





## PROGRAMME DETAILS

- Programme Commencement:** 9:00 AM on December 16, 2024
- Programme Conclusion:** 2:00 PM on December 20, 2024
- Accommodation:** For Residential participants, on single occupancy
  - **Check-in:** December 15, 2024 (6:00 PM onward)
  - **Check-out:** December 20, 2024 (2:00 PM)



### Tentative Schedule of Activities

Date	Time	Session
16-12-2024 Monday	9:00-9:30	Inauguration
	9:30-11:00	Business Analytics – Myths
		Promises, and Reality: Artificial Intelligence and Machine Learning perspectives
	11:00-11:15	Tea Break
	11:15-12:45	Business Analytics and Data Driven Decision Making: Statistical Perspective
	12:45-14:00	Lunch Break
	14:00-15:30	Business Analytics: Success and Failure Case Studies
	15:30-15:45	Tea Break
15:45-17:15	Hypothesis Testing and Statistical Inference: Applications to analytics	
17-12-2024 Tuesday	9:30-11:00	Data Visualization and Interpretation
	11:00-11:15	Tea Break
	11:15-12:45	Regression: Strengths and Pitfalls – Case Study/Applications
	12:45-14:00	Lunch Break
	14:00-15:30	Risk Analytics and Simulations: Case study/Applications
	15:30-15:45	Tea Break
	15:45-17:15	Logistic Regression: Case Study/Applications
18-12-2024 Wednesday	9:30-11:00	Financial Analytics: Case study/Applications
	11:00-11:15	Tea Break
	11:15-12:45	Learning from Organization History using Artificial Neural Network: Applications
	12:45-14:00	Lunch Break
	14:00-15:30	Combining expert opinion and data driven intelligence for decision making: Case study/Applications
	15:30-15:45	Tea Break
	15:45-17:15	Bigdata Prospects and the Reality: Case Study/Applications
19-12-2024 Thursday	9:30-11:00	Blockchain: Current state of affair, Prospects, and Concerns
	11:00-11:15	Tea Break
	11:15-12:45	Unsupervised Learning with Clustering: Case Study/Applications
	12:45-14:00	Lunch Break
	14:00-19:00	Choice between Optional city Tour(Optional) and Open discussion with faculty
20-12-2024 Friday	9:30-11:00	Social Network Analytics: Emerging research and Applications, Generative AI
	11:00-11:15	Tea Break
	11:15-12:45	Analytics readiness of an organization, Career prospects in analytics, Valedictory
	12:45-14:00	Lunch



## PROGRAMME FEES

- Residential (R):** ₹ 1,35,000/- plus taxes and surcharges as applicable.
- Non-Residential (NR):** ₹ 1,25,000/- plus taxes and surcharges as applicable.

We would strongly encourage candidates to enroll as Residential participants, as the experience of an MDP is optimized in a full-immersion mode.

### Discount on Programme fees:

A discount of 10% on the Programme fees can be availed by an organization if it nominates at least 4 participants for a particular MDP.

## TERMS & CONDITIONS

- Participants would have to make their own travel arrangements.
- Accommodation at IIM Calcutta will be provided till 2:00 PM on the last day of the Programme. Participants who may wish to stay beyond this time will have to check with the CMDP Office for room availability, and associated charges. IIM Calcutta does not provide any family accommodation.
- Cancellation Policy: In case you/your nominated candidate(s) does(do) not attend the programme, 40% of the programme fees will be retained, as per policy.
- Executive Education Alumni: With effect from April 01, 2017, participants of IIM Calcutta's 'Open' MDPs who attend 20 days of learning through two or more Open MDPs will be eligible to apply for 'Executive Education Alumni of IIM Calcutta' status.

## HOW TO APPLY

- You can apply/nominate your personnel by clicking on the "Apply Now" link corresponding to the particular MDP, as appearing on our online calendar available at: <https://iimcal.ac.in/mdp/mdp-calendar>
- Once the candidature(s) is (are) approved, the sponsoring authority or participant (in case of self-nomination) will be intimated over email along with a Proforma Invoice seeking programme fees in advance.
- Programme fees can be remitted online through Electronic Fund Transfer (NEFT/RTGS).
- Upon remitting the fees online, kindly intimate CMDP office with the UTRNo./relevant transaction details through email, so that we can connect your remittance to your nomination(s). Please note that confirmation of participation is subject to receipt of Programme fees by CMDP Office before commencement of the MDP.

## IIM CALCUTTA'S ACCREDITATIONS AND RANKINGS

- Triple accreditations by AACSB (Association to Advance Collegiate Schools of Business), AMBA (Association of MBAs) & EQUIS.
- IIM Calcutta is the only B school in India to be a member of CEMS, a global alliance of leading business schools, multinational companies and NGOs
- IIM Calcutta's MBA programme has been ranked 60th and MBA-Ex programme 76th in Financial Times Global rankings, 2023. In Domestic rankings, the Institute has secured 1st position in both BT-MDRA and Fortune India Best B-School Survey 2023



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**For all other details on administrative matters please refer to the 'Guidelines for Participants' on our website or e-mail to [program\\_mdp@iimcal.ac.in](mailto:program_mdp@iimcal.ac.in)**