





POST GRADUATE DIPLOMA IN

BUSINESS ANALYTICS

BATCH - 9 YEAR - 2023-2025



DEVELOPING
ANALYTICS
PROFESSIONALS
FOR THE 21ST CENTURY



ABOUT THE PROGRAMME

The data production and capture continue to surge exponentially. As per International Data Corp. (IDC), 64.2 Zettabytes (equivalent to 64.2 billion Terabytes) of data were created in 2020, a staggering eighty-fold increase from 2010. IDC also forecasted that global data creation and replication will experience a compound annual growth rate (CAGR) of 23% over the 2020-2025 forecast period. This immense volume of data holds great potential for business enterprises, enabling them to gain new insights, make better decisions, and enhance organizational processes. Business analytics, which involves use of statistical, machine learning, and quantitative techniques to analyze data, plays a vital role in understanding past business performance and generating valuable insights for the future.

According to Statistics MRC, the Business Analytics Market was valued at \$73.5 billion in 2020 and is estimated to reach \$185.9 billion by 2028, growing at a CAGR of 12.3% from 2020 to 2028. Despite the increasing significance of business analytics, there remains a substantial shortage of trained analytics professionals to meet the demand.

In India, the analytics market is expanding at a CAGR of ~8.70% during the 2022 – 2027 period. Revenue in this industry reached \$31.6 billion in 2018 alone, according to a report published by NASSCOM and Blueocean Market Intelligence. Sources within the Analytics Special Interest Group established by NASSCOM project a shortage of approximately 200,000 data scientists in India over the next few years. Thus, there is a pressing need to train industry-ready business analytics professionals.

To address this demand, the Post Graduate Diploma in Business Analytics (PGDBA) program is jointly launched

by three premier institutes in India— IIM Calcutta, ISI, and IIT Kharagpur, each renowned in its respective field. The program aims to produce data-driven managers sought after by the industry. The program was initiated with an Industry Conclave, where major multinational corporations and pure-play analytics firms provided their valuable inputs.

The PGDBA program is specifically designed for individuals with an analytical mindset, a passion for solving complex business problems, and a strong inclination towards mathematics. One of the key highlights of the PGDBA program is its collaborative nature. Students benefit from the expertise and resources of all three institutes involved. Renowned faculty members from IIM Calcutta, ISI, and IIT Kharagpur contribute to the program, ensuring a comprehensive and diverse learning experience. This multidisciplinary approach enables students to understand business analytics and its practical applications holistically.

Hands-on training plays a vital role in the PGDBA program. Students have the opportunity to gain real-world experience through business analytics training at related companies. This practical exposure helps them bridge the gap between theory and practice, preparing them to tackle the challenges they will face in their professional careers.

Throughout the duration of the program, students also benefit from continuous interaction with industry leaders. This engagement allows them to stay updated with the latest industry trends, network with professionals, and gain insights from real-world business scenarios. It fosters a strong industry-academia partnership, ensuring that the program remains aligned with the needs and expectations of the business analytics industry.



PROGRAMME OVERVIEW

Students will attend courses offered in three different semesters by three institutions - ISI, IIT Kharagpur, and IIM Calcutta, in sequence. Each of the three institutes will focus on a separate area of business analytics, in accordance with its expertise and competence. While the coursework at IIM Calcutta will focus on the application of analytics in functional areas, ISI will bring to the table its expertise in statistical and machine learning theories for analytics, and faculty at IIT Kharagpur will engage with the technology aspects of analytics. In addition, the students will be required to do an internship of six-months duration (fourth semester) on an analytics project in a business organization. The programme being residential, each institute will make suitable arrangements for hostel accommodation for the students.

Students successfully graduating from the programme will be expected to join organizations working in the area of analytics. Those interested in higher studies may pursue doctoral or other advanced studies in are as related to analytics.

PARTICIPATING INSTITUTIONS

IIM CALCUTTA

The Indian Institute of Management (IIM) Calcutta was established as the first national institute for Post Graduate studies and Research in Management by the Government of India in November, 1961. Over the years, IIM Calcutta has grown into a mature institution of global reputation, imparting high quality management education. It has been playing a pioneering role in professionalizing Indian Management through its Post Graduate and Doctoral level programs, Executive Training Programs, Research and Consulting activities. Its continued focus on excellence, eminent faculty, strong alumni base and ties to the business community have made IIM Calcutta one of the best business schools in Asia.

ISI

Indian Statistical Institute (ISI) is a globally reputed institution devoted to the research, teaching and application of statistics, natural sciences and social sciences. Founded by Professor P. C. Mahalanobis in Kolkata on 17th December 1931, the institute gained the status of an Institute of National Importance by an act of the Indian Parliament in 1959. The Headquarter of ISI is located in the northern fringe of Kolkata. Additionally, there are four centers located in Delhi, Bangalore, Chennai and Tezpur. While teaching and research in statistics and related disciplines are the primary activities of the institute, it is also involved in projects and consultancy in such are as Statistical Quality Control and Operations Research.

IIT KHARAGPUR

The Indian Institute of Technology (IIT) Kharagpur was established by the government of India in 1951. The first of the IITs to be established, it was recognized as an Institute of National Importance in1956. From a modest start with 224 students and 42 teachers, IIT Kharagpur has become one of the top educational hubs in the country with 18 academic departments, five centers of excellence and about 550 faculties. IIT Kharagpur is widely recognized for spearheading new standards in engineering education. The institute has also made significant contributions towards various spheres of national development from the strategic sectors of Defence, Space and Atomic energy to the Economic, Public and Development sectors that directly or indirectly touch the lives of all the citizens of India.







COMMUNIQUE FROM COORDINATORS



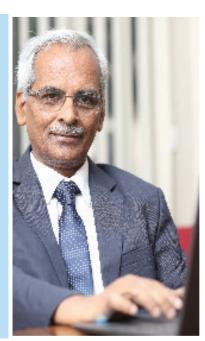
Post Graduate Diploma in Business Analytics (PGDBA) is a full time, residential program in business analytics offered jointly by three esteemed institutes: Indian Institute of Management (IIM) Calcutta, Indian Statistical Institute (ISI), Kolkata, and Indian Institute of Technology (IIT), Kharagpur. Naturally, the uniqueness of this program emanates from the amalgamation of business, statistics, and technology. The program conducts an extremely competitive selection process and maintains a good mix of experienced and fresh graduates to build an impressive batch profile over the years. More importantly, unlike any other program, an industry internship of six months stands this program out from the rest of its cohort as it makes the participants completely industry ready. The rigorous and demanding training imparted by the three institutes through theory, case studies and business simulations prepare the students for the world of business analytics. In addition, students of PGDBA organize a pioneer, tri-institute flagship analytics summit of India, Trilytics, that features an analytics case competition at global level. Such a rich exposure in analytics helps students build the ability to think critically and find data driven solutions to management problems using appropriate tools from the field of data science. I am sure that this unique tri-institute PGDBA program will grow more and more in future to cater the increasing demand of data scientists, globally.

PGDBA Chairperson, IIMC



The Post Graduate Diploma in Business Analytics (PGDBA) program offers a unique opportunity for students to receive high-quality education and training in business analytics. The key aspect of this program is that the students get trained in analytics, technology, and management from the top three institutes of the country in these areas. In addition, the six months' industry internship on analytics projects is a crucial component of the program. In essence, the curriculum of the PGDBA program is designed in such a way that it not only matches the demands of the industry but also prepares the students for the world of business analytics. At ISI, we have a legacy of excellence in education and research. Our institution is renowned globally for its contributions to the fields of statistics, mathematics, and computer science. Our faculties in the PGDBA program are experts in statistical and machine learning theories for analytics. Their expertise and guidance contribute significantly to the quality of education provided. Besides maintaining meticulous academic standards, we encourage students to engage in physical activities, social engagement, and interaction with faculties and researchers. I am sure the students will have a fruitful time. I am excited to witness their growth and achievements.

PGDBA Coordinator, ISI



The tri-institute Post Graduate Diploma in Business Analytics (PGDBA), offered by three premier institutes of India, is among the top-ranking programs of its kind in India and Asia. The programme draws its strength from the curricula of the three participating institutes – IIM Calcutta, ISI and IIT Kharagpur and provides an opportunity to the students to be trained to be top professionals capable of handling challenging scenarios with business analytics application. The rigorous and demanding training imparted by the three institutes through theory, case studies and the one-semester industry internship make PGDBA one of the most sought after academic programmes in India.

The Indian Institute of Technology Kharagpur, the first in the chain of IITs, the premier technological institutes in India, is the host to numerous programs and disciplines including management, computer science, mathematics, entrepreneurship, law and humanities offers a wide variety of analytics and business-related subjects to the students of PGDBA, who spend the second semester of their programme at IIT Kharagpur. The PGDBA students have been among the most dedicated and passionate groups of students I had the opportunity to interact with. I hope that the dedication of the students and the constant support of the faculty members and administrations of the three institutes will take the programme to greater heights in future.

PGDBA Coordinator, IIT Kharagpur



ELIGIBILITY CRITERIA FOR PGDBA

A candidate must hold a graduate/ post graduate degree with any of the following:

- 10+2+4: Minimum of marks, and/ or CGPA 6.5 on a 10-pointscale, and/ or equivalent, in the BS/BTech/BE or equivalent Level.
- 10+2+5: Minimum of marks, and/ or CGPA 6.5 on a 10-pointscale, and/ or equivalent, in the Integrated Masters or equivalent Level.
- 6.5 on a 10-point scale, and/ or equivalent, in the Masters Level.

For SC/ST and Differently Abled (DA) category candidates, the qualifying marks for eligibility shall be 55% and/or CGPA 6.0 on a 10-point scale, and/or equivalent.

Candidates, who are in the final year, are also eligible to apply provided they appear in the final examination and complete other academic requirements as specified above by May 31, 2023. For such cases, admission will be provisional subject to meeting the eligibility criteria as mentioned above. Proof of having passed the qualifying degree with required eligibility, as specified above should be submitted by October 31, 2023.



WRITTEN TEST AND PERSONAL INTERVIEW

Application Fee

General	OBC	EWS	SC	ST	PWD
INR 2500	INR 2500	INR 1250	INR 1250	INR 1250	INR 1250

Important Dates

Commencement of On-line Submission of Application	25 January 2023 (Wednesday)
Last Date for Submission of Application	02 March 2023 (Thursday)
Downloading of Hall Ticket / Admit Card	10 March 2023 (Friday)
MOCK Test	16-17 March 2023
Computer Based Test (CBT)	26 March 2023 (Sunday)
	(10:00 AM to 01:00 PM)
Intimation of CBT Results through Portal	05 April 2023 (Wednesday)
Intimating Interview details through Portal	12 April 2023 (Wednesday)
Personal Interview for Shortlisted Candidates	6-7 May 2023
Announcement of List of Selected Candidates	From 17 May 2023 (Wednesday)
Closure of Admission Process	By June 2023
Commencement of PGDBA Programme	17 July 2023 (Monday)

A written test held on 26th March 2023, to shortlist candidates for personal interview. Candidates shortlisted after the written test are called for personal interview held on 6-7 May 2023. The final offer made on the basis of performance in the written test, personal interview, work experience and academic standing.

Cities for Written Test and Personal Interview are: Kolkata, Mumbai, Delhi, Bangalore.



HOW TO APPLY

- Eligible candidates are requested to Apply online https://www.isical.ac.in/~pgdba/index.html
 Application fee Rs.2500/- (Rs.1250/- for candidates belonging to SC/ST/DA/PWD/EWS categories).
- Self-attested copies of all requested documents should be uploaded.
- Last date of submission of online application 2nd March, 2023
- In case of inquiries, please send an email to: Email: pgdba@isical.ac.in Phone: 033-25752521



RESERVATION

As per Government of India stipulations for SC/ST/OBC (NCL)/EWS and Differently Abled (DA) candidates.





PROGRAMME FEES

The programme fee for the 2023-25 batch is Rs 25 lakh plus a refundable caution deposit of Rs. 10,000.00. The fee needs to be paid in four equal installments at the time of registration for each semester. Late payment of fees will incur penalties as per the policy of each Institute. The fees will cover tuition, on campus lodging, some books and study materials, examination materials, and laboratory charges, among others. Programme fee will NOT cover caution money, food related expenses, and lodging and any travel expenses that the students may incur in Semester 4 when they visit any industrial location (Lodging will be provided during project evaluation after internship and placement).

PGDBA ACADEMIC CALENDAR YEAR 2023 - 2024

Pre Semester (IIMC)	July 17, 2023 to August 18, 2023	4 Weeks
1st Semester (ISI)	August 19, 2023 to December 31, 2023	20 Weeks
2nd Semester (IIT-KGP)	January 2, 2024 to April 30, 2024	16 Weeks
3rd Semester (IIMC)	May 06, 2024 to September 30, 2024	19 Weeks
4h Semester (Industry Internship)	October 01, 2024 to March 31, 2025	24 Weeks

PRE-SEMESTER COURSE LIST IIM-CALCUTTA – CORE COURSE

Course Name	Course Type
Marketing Management	Core
Financial Reporting & Analysis	Core
Contemporary Business Analytics	Core
Organizational Behaviour	Core
Managerial Communication	Core

SEMESTER - I COURSES AT ISI

Course Name	Course Type
Computing for Data Sciences	Core
Fundamentals of Data Base Systems	Core
Inference	Core
Statistical Structures in Data	Core
Stochastic Processes and Applications	Core





SEMESTER - II COURSES AT IIT KGP

Course Name	Course Type
Data Science Laboratory	Core
Foundations of Algorithm Design and Machine Learning	Core
Modelling in Operations Management	Core
Regression and Time Series Models	Core
Electives - I	
Big Data Processing	Elective
Complex Network	Elective
Deep Learning	Elective
Electives II and III	
Product Analytics	Elective
Supply Chain Analytics	Elective
Optimization arid Business Decision Analysis	Elective
Basics of Marketing Analytics	Elective
Business Accounting and Banking Analytics	Elective
Healthcare Analytics	Elective

SEMESTER -III COURSE LIST - CORE & ELECTIVE IIM-CALCUTTA

Course Name	Course Type
Categorical Data Analysis	Core
Business Data Mining	Core
Business Economics	Core
Project Management	Core
Strategic Management	Core
Human Resource Management	Core
Corporate Finance	Core
Electives	
Selected aspects of Advanced Predictive Modelling	Elective
Econometric Methods with Applications in Business and Economics	Elective
Financial Risk Management	Elective
Computational Finance	Elective
Pricing Revenue Optimization	Elective
Games & Information	Elective
Leading Professional Teams	Elective
Bayesian Methods for Business Analytics	Elective
Intercultural Business Communication	Elective

SOME FAQS

1. What is PGDBA?

The PGDBA is a 2-year full-time Post Graduate Diploma in Business Analytics (PGDBA) jointly offered by IIM Calcutta, IIT Kharagpur and ISI

2. For whom is PGDBA suitable?

PGDBA is a two-year full time diploma programme aimed at creating business analytics professionals employable by leading Indian and foreign firms. This programme is designed for those who have an analytical mindset, are interested in tackling challenging business problems, and possess an inclination towards Mathematics. Some of the salient features of the programme include courses taught by reputed faculty members at the campuses of three globally renowned institutes, hands-on business analytics training at a related company, continuous interaction with industry leaders throughout the course of the diploma programme, and the availability of placement opportunities at all three institutes jointly offering this programme.

3. What would I learn at IIMC, ISI and IIT Kharagpur?

PGDBA participants will visit the three institutions - Indian Statistical Institute at Kolkata, Indian Institute of Technology Kharagpur and Indian Institute of Management Calcutta - spending about six months at each institute. Each of the three institutes will focus on a separate area of business analytics, in accordance with its expertise and competence. While coursework at IIM Calcutta will focus on the application of analytics in functional areas of management, ISI will bring to the table its expertise in statistical and machine learning theories for analytics, and faculty at IIT Kharagpur will engage with the technology aspects of analytics.

4. How do I apply?

Eligible candidates are requested to apply online at: https://www.isical.ac.in/~pgdba/index.html

Application Fee Rs.2500/- (Rs.1250/- for candidates belonging to SC/ST/DA categories).

5. What is the selection process for admission into PGDBA?

A written test will be held on 26th March, 2023, to shortlist candidates for personal interview. Candidates shortlisted after the written test will be called for personal interview to be held on May 6th and 7th, 2023. The final offer would be made on the basis of performance in the written test, personal interview, work experience and academic standing.

6. What is the duration of the programme?

The PGDBA is a 2-year full-time Post Graduate Diploma in Business Analytics (PGDBA) jointly offered by IIM Calcutta, IIT Kharagpur and ISI.

7. How many seats are there in PGDBA in 2023-25?

There are a maximum of 65 seats in PGDBA in 2023-2025.

8. Is Reservation Policy applicable for PGDBA in 2023-25?

Yes, the reservation policy of the Government of India is applicable for PGDBA in 2023-2025

9. Is Campus Placement available for PGDBA?

Starting from 2019, IIM Calcutta will coordinate the placement services for PGDBA with active support from ISI and IIT Kharagpur. Placement services are available for eligible students. There are two placement cycles for PGDBA. The first is internship (August – September) for second year students. The second cycle is Final placements in the following year (February – March). Most students convert internships into permanent offers. Some choose to change their organizations or track after the internship. The programme encourages student and recruiter satisfaction.

The placement team coordinates with various recruiters to assess candidates. The students are expected to surpass recruiter expectations. The faculty, students and the institutes work together to ensure that outcome is positive for everyone. However, the onus of the effort lies with a particular programme participant and not with the institute(s).

PGDBA has evinced strong demand from recruiters since its inception. Several reputed firms including Fortune 500 firms look forward to hire talent from PGDBA. Past statistics are available at the website @https://www.iimcal.ac.in/programs/pgdba/placement/final-placements/overview.

10. Who will be giving the Diploma? When and where will be the Convocation held?

Post Graduate Diploma in Business Analytics will be given jointly by IIM Calcutta, IIT Kharagpur and ISI. A candidate can receive his/ her diploma at the convocations held at any of the three institutes during the year after the completion of all requirements for the diploma.

11. Is The PGDBA Programme Fully Residential?

Pre-semester and the first three semesters of the programme are residential.

12. Is there any Internship as part of the PGDBA programme?

In addition to the time spent at IIMC, ISI and IIT Kharagpur, the students will be required to do an internship based project of six months duration for a hands- on analytics experience at a business organization.

13. Will be there any Attendance Rule?

Attendance rules that are applicable to the host Institute will be followed in each semester.

14. What are the Pass/ Fail Rules?

Pass/fail Rules for in a given semester will be those generally applicable in the host Institute of that semester.

15. Are there opportunities to engage in student clubs and activities?

While PGDBA has its own dedicated teams, students also have the option to participate in clubs and teams in all three institutes during their stay at the institute campus through lateral recruitment, which occurs annually.

16. Are students actively involved in case competitions and hackathons?

Absolutely! Students not only participate but have also achieved remarkable success, securing podium positions and representing PGDBA in diverse case competitions at different IIMs. These competitions cover a wide range of topics such as analytics, operations, and finance. Additionally, students have actively participated in hackathons focused on machine learning and deep learning organized by IITs. They also take part in Kaggle competitions to showcase their skills and expertise.



























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