



भारतीय प्रबंध संस्थान कोषिककोड  
Indian Institute of Management Kozhikode  
*Globalizing Indian Thought*

**BATCH 5**

# DATA ANALYTICS FOR BUSINESS STRATEGY: ESSENTIAL TOOLS AND APPLICATIONS

Starts December 30, 2022 | Executive Alumni Status\*

10 months, Live Online Sessions



# IIM Kozhikode Advantage

*From the Director's Desk...*

Businesses today have seen a complete transition than they used to run a decade ago. IIM Kozhikode programmes designed by world-class faculty with their cutting-edge thought leadership and industry-leading insights empower participants to manage and lead complex business challenges with confidence and informed decision-making ability. Our growing global footprints acknowledged and accredited by leading institutions of the world are a testimony to growth we have achieved in our 25-year journey of academic excellence.

At this juncture, it is also pertinent to share that both future and past are integral to the path taken by an institution on this journey of excellence. Having a wide, far-seeing vision is not an indulgence but an activity that is necessary to give meaning to our present, to give this Institution a sense of purpose, direction and imagination. That is why we have chosen to think in terms of what IIM Kozhikode will be able to contribute to India and the world some three decades from now with 'Vision 2047: Globalizing Indian Thought'. The sheer scale, scope and potential impact that India will have on 21st century business makes us believe that this is a legitimate aspiration.

It is pertinent to note that data is one of the most important commodities in the world today and the knowledge of how to analyse, extrapolate and segregate it is of paramount importance across industries. The right use of data can help propel your organisation and career to new heights, to make the most of this commodity, the Indian Institute of Kozhikode has launched the Advanced Data Analytics for Managers programme. This programme will empower Team Leads, Managers and Business Head to elicit the most out of data through topics such as Data Visualisation, Statistical Inferences, Basics of Modelling, Text Mining & Social Media Analysis among others. This programme curriculum is designed around the importance of being industry-ready in a data-driven future.

Wishing you all the very best!



**Prof. Debashis Chatterjee,**  
Director IIM Kozhikode



# Overview

Data analytics fuels the modern business strategies and decisions. Instead of drowning under heaps of data, companies are now using data analytics for business growth and profit maximisation. As a result, business decision-making is no more impulsive, but informed by solid evidence and insights extracted from complex data by using data analytics.

IIM Kozhikode's **Data Analytics for Business Strategy: Essential Tools and Applications** will equip you with tools to combat real-world problems using data analytics and thus, refine day-to-day business decision making. You will learn applications of data analytics in marketing, product, retail & sales, customer research & insights, and digital marketing. By the end of the programme, you will acquire a data-driven analytical framework that will help you solve critical business challenges and spur career advancement.

**Starts On:** December 30, 2022\*

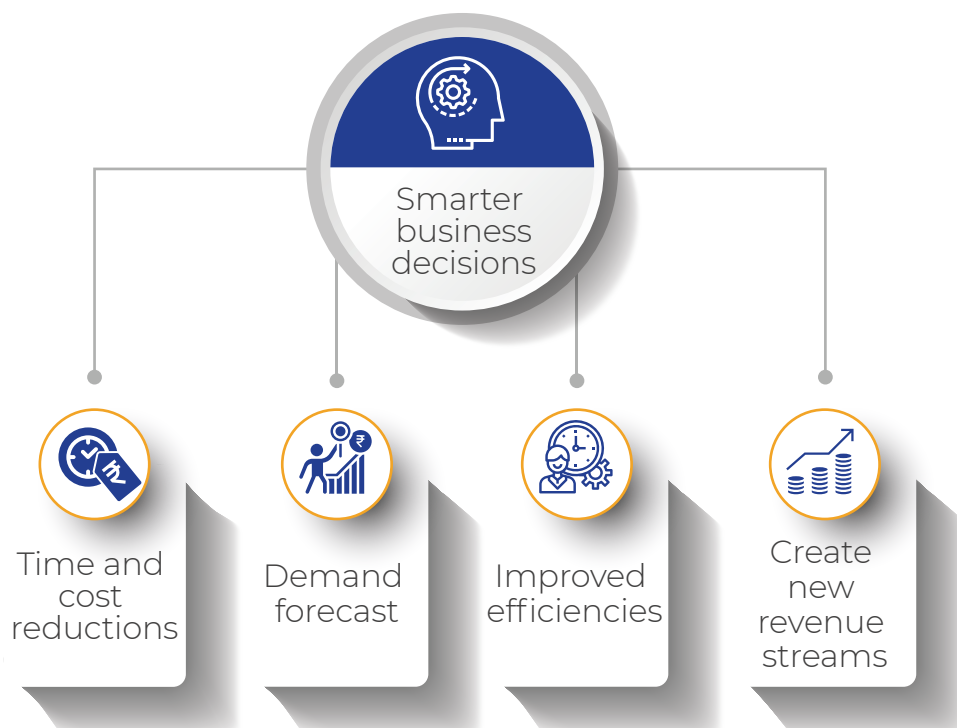
**Duration:** 10 Months

**Format:** Live Online Sessions

## Programme Fee

INR 1,75,000 + GST  
(Exclusive of Application Fee)

## Benefits of Data-Driven Decision Making



# Who is this programme for?

This cutting-edge programme is for leaders who want to advance their career as analysts. It will help you acquire the relevant analytical mindset to disrupt, innovate and scale your organisation's decision-making strategies for an improved ROI

- Early-stage professionals aspiring to strengthen their skills and establish a career in data analytics, product, sales, marketing, and branding domains
- Senior managers and leaders who want to acquire a nuanced understanding of the application of analytics to conceptualise superior business strategies
- Consultants who want to use the right mix of data analytics, insight and strategy to assist their clients in connecting the dots
- Entrepreneurs and business owners keen on driving customer-centric decision-making through practical data analytics strategies

**The global Predictive Analytics market size to grow from USD 10.5 billion in 2021 to USD 28.1 billion by 2026, at a Compound Annual Growth Rate (CAGR) of 21.7%**

– Source: Yahoo Finance, 2021

# Programme Highlights

With data being ubiquitous across businesses, professionals with an industry-recognised certificate, hands-on exposure to analytical tools and knowledge of best practices in data-driven marketing have a significant edge over their peers.



Receive a Certificate of Completion from one of India's leading B-Schools (NIRF, 2022)

Interact with eminent IIM Kozhikode faculty & Emeritus Industry Expert



Experience high-impact learning with industry case studies and gain actionable insights

Be eligible for lifelong Executive Alumni Status and expand your professional network



Become skilled at data-driven decision-making to enhance ROI and business growth

Explore data analytics practices, tools and applications to optimise digital marketing efforts



**Tools/ Softwares Covered:**



Excel

**XLSTAT**  
by Addinsoft

 python™

*Note: All product and company names are trademarks or registered trademarks of their respective holders. Use of them does not imply any affiliation with or endorsement by them.  
- Usage and coverage of tools will be the faculty's discretion*

# Programme Director



**Prof. Sreejesh S.**

Associate Professor,  
Marketing Management

Prof. Sreejesh's primary research interests include marketing analytics, brand management, services marketing, and online marketing & advertising. His publications have appeared in Journal of Brand Management, Industrial Marketing Management, European Journal of Marketing, Computers in Human Behaviour, Journal of Travel and Tourism Marketing, International Journal of Contemporary Hospitality Management, Internet Research, Journal of Product and Brand Management, Journal of Service Theory and Practice, International Journal of Bank Marketing, etc. He serves on the editorial board of the International Journal of Consumer Studies. He has also authored books of international repute with Pearson India and Springer International.

# Industry Expert



**Prof. Vikas Sunkad**

As a Strategic, Innovative & Design Thinker, Vikas Sunkad has an impressive history of surpassing ambitious business goals in areas of Business Management primarily in FMCG industry. He has a consistent record of positioning organizations for success, spurring sales growth, opening new revenue streams, and building highly accomplished teams that demonstrate a profound dedication to operational excellence.

Vikas has strong entrepreneurial ability in translating vision into execution & he is always ready to hit the ground running and deliver results quickly. He has led sustainability initiatives like Water Replenishment, Solar Coolers, Women Empowerment, Covid Relief programs etc.

He was associated with Coca-Cola India Pvt. Ltd. since 2005 & in his last role was working as a VP Operations – Company Bottling (CBO) Markets and was responsible to grow business in markets of South, East & West India..

In his last role, his most notable contribution was to lead creation of the Grocery Rural Online Wholesale (GROW) framework which helped re-pivot the business from away from home to at-home occasions in the after-math of the pandemic, which resulted in steep recovery & growth in Q4 2020.

He has been at the forefront of transformative technology projects like Modeling, ERP, Front-line Automation, Data Analytics & Visualization.

Vikas worked with Hindustan Coca Cola Beverages Pvt. Ltd. (TCCC Bottler) from 2003-2005 where he handled SCM leadership

# Programme Modules

## MODULE 1: DATA AND SOURCES OF DATA

- Types of data: qualitative and quantitative/primary vs. secondary
- Use of various data collection techniques across various business domains
- Qualitative data collection techniques (FGDs and Depth interviews)
- Quantitative data collection techniques (Survey)
- Quantitative data collection techniques (Experiments)

## MODULE 2: DATA ANALYTICS FUNDAMENTALS

- Use of various software for data analytics
- Introduction to R/IBM SPSS
- Data coding and preliminary data analysis
- Data cleaning and generating insights through graphics/Visualisation
- Generating insights through descriptive analytics

## MODULE 3: UNDERSTANDING STATISTICS FOR BUSINESS APPLICATIONS

- Introduction to statistics and its applications using software
- Descriptive statistics and its applications
- Inferential statistics and test of hypothesis

## MODULE 4: DATA MINING AND PREDICTIVE MODELLING ALGORITHMS FOR BUSINESS DATA

- Supervised/unsupervised learning algorithms
- Regression Analysis
- Logistic Regression
- KNN
- Decision tree
- Random Forest
- Bagging and Boosting

## **MODULE 5: DATA ANALYTICS FOR PRODUCT STRATEGY FORMULATION**

- Developing product introduction strategy
- Formulating the data driven pricing strategy
- Analyse profitability potential for new products
- Estimating the potential volume and new product demand
- Managing products with sustainable competitive advantage

## **MODULE 6: DATA ANALYTICS FOR MARKETING AND CUSTOMER ANALYTICS**

- Expected profitability of newly acquired customers
- Customer level purchase information for customer retention
- Predicting customer churn
- Improving customer satisfaction through data driven insights
- Managing customer loyalty
- Understanding Customer Lifetime Value
- Recency, frequency, and monetary value (RFM) of customers

## **MODULE 7: DATA ANALYTICS FOR FINANCIAL DECISIONS**

- Fundamentals of Finance & Financial Analytics
- Data analytics for financial strategy formulation
- Financial modelling and Prediction
- Stock Price Forecasting

## **MODULE 8: DATA ANALYTICS FOR DIGITAL/ SOCIAL MEDIA**

- Text mining for business insights
- Deciding the media strategy
- Publisher optimisation
- Campaign optimisation
- Analysing effectiveness of digital media marketing

## **MODULE 9: DATA ANALYTICS FOR OPERATIONS AND SUPPLY CHAIN**

- Introduction to Operations and Supply chain Metrics
- Demand Analytics for Planning & Forecasting
- Analytics for Inventory Optimization
- Prescriptive Analytics in Network Design & Planning



## MODULE 10: DATA ANALYTICS FOR HRM

- Evolution of HR analytics
- Optimising hiring strategies using data driven insights
- HR cost and attrition prediction
- Analytics for talent management
- Predicting performance appraisals using inferential statistics

*Note: Modules/ topics are indicative only, and the suggested time and sequence may be dropped/ modified/ adapted to fit the total programme hours.*

## Capstone Project

With the capstone project, participants will gain hands-on learning experience in conducting data analysis using various tools covered in the programme. This project will provide participants with an opportunity to integrate their theoretical and practical understanding of data analytics and explore ways to apply their learnings in a real-world competitive business scenario.

**Business leaders are beginning to understand the importance of using data and analytics to accelerate digital business initiatives. Instead of being a secondary focus completed by a separate team —data and analytics is shifting to a core function.**

– Source: Gartner, 2021

# Real-world Case Studies

## Jennie Maze Limited: Enhancing Call Center Performance Using Predictive Analytics

This case will help the programme participants to understand and appreciate the utilisation of predictive analytics for improving the performance of a call center, using time series forecasting. This case study will necessitate effective teamwork on data cleaning and preparation and modelling/analysis of time series.

## Predicting Earnings Manipulation by Indian Firms Using Machine Learning Algorithms abstract

Established in 2015, in Bengaluru, MCA Technology Solutions helped its clients with its expertise in domains such as customer intelligence, forecasting, optimisation, risk assessment, web analytics and cloud solutions. When one of their clients, a commercial bank, approached them to get assistance in detecting earnings manipulators among the bank's customers, Saurabh Rishi (Chief Data Scientist at MCA Technology Solutions) decided to develop his own model for predicting earnings manipulations using data downloaded from the Prowess database maintained by the Centre of Monitoring Indian Economy (CMIE). Data on more than 1200 companies was collected to develop the model.

## Improving Lead Generation at Eureka Forbes Using Machine Learning Algorithms

One of the world's largest direct sales company, Eureka Forbes wanted solutions to overcome the high customer acquisition costs by leveraging the data generated from its digital presence. Tatvik's Data Science team applied the PredictN model to decode the data generated using Google Analytics Reporting API, which ultimately resulted in higher conversion rates and lower digital activity costs.

*Note: The programme curriculum includes more such case studies for integrated learning.*

# Learning Outcomes



Understand how data-driven insights can be used for making effective decisions across domains like Marketing, Finance, Operations and HR.



Identify the correct analytics tool for a specific need and find reliable ways to collect, analyse, visualise and utilise data for decision-making.



Understand how analytics can help to generate new product ideas and to screen and evaluate alternatives.



Learn how to compute Customer Lifetime Value for analysing customer loyalty, brand loyalty and forecasting revenue in the short and long run.



Learn predictive modelling and its applications across domains.



Learn the concepts and metrics to evaluate and optimise digital marketing efforts.



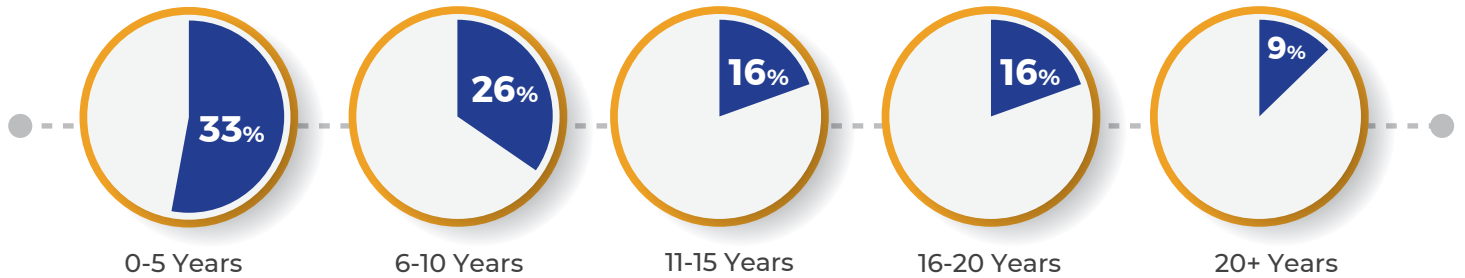
Understand how to use data analytics to forecast, plan and optimise inventories.



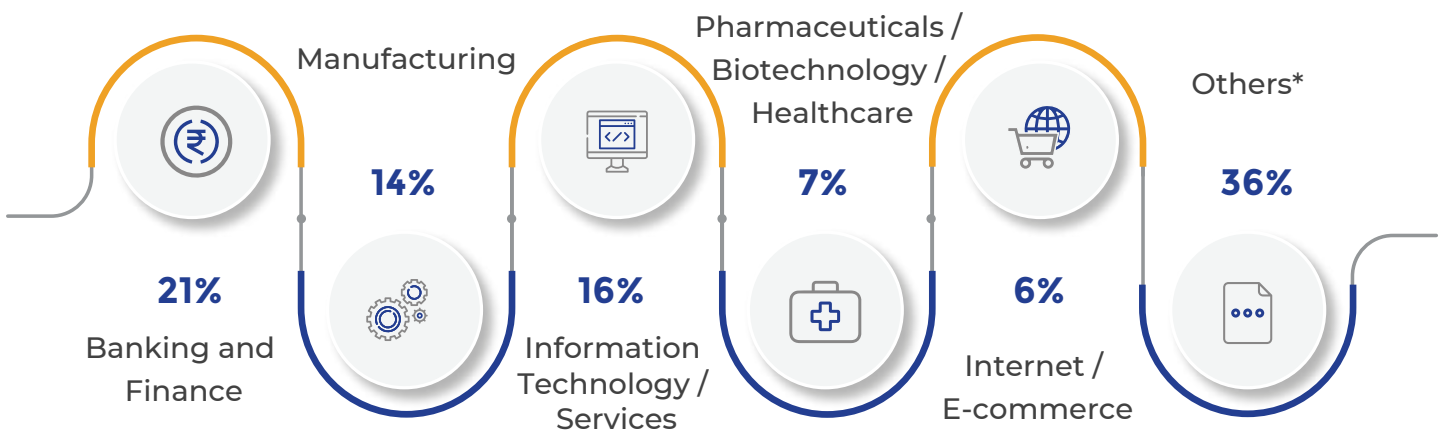
Learn how to streamline HR costs, predict attrition, and optimise hiring strategies using data-driven insights.

# Past Participant Profile

## Work Experience

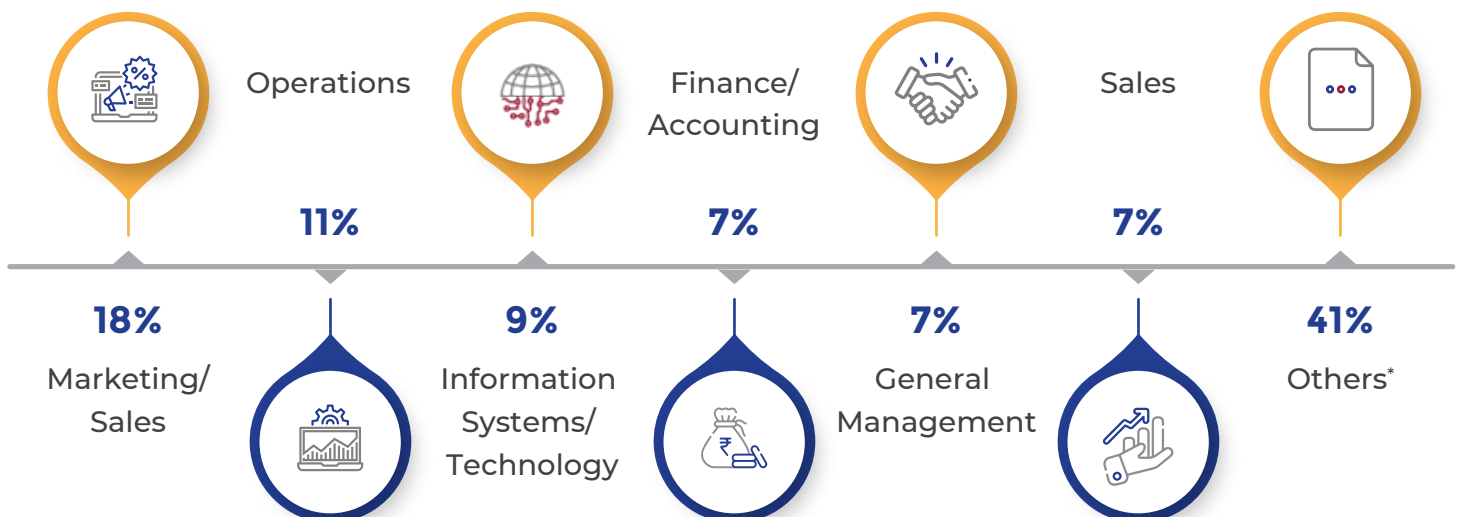


## Industries



\*Others include FMCG, Healthcare, Retail, etc.

## Participant Job Functions



\*Others Include Sales, Consulting, Engineering, HR, etc.

# Certificate

Participants will be awarded a completion certificate from IIM Kozhikode on successfully completing all evaluation components and maintaining a minimum attendance of 75%. Participants who are unable to clear all evaluation components, but have a minimum attendance of 75% shall be awarded a participation certificate.



*Note: All certificate images are for illustrative purposes only and may be subject to change at the discretion of IIM Kozhikode.*

## Eligibility

Graduates/ Diploma Holders (only 10+2+3) from a recognised university in any discipline with minimum one year of work experience (after graduation) as on June 30, 2022

## Evaluation

The evaluation methodology is at the discretion of the faculty and includes online exams, case analysis, class contribution, assignments and any other components. A minimum of 75% attendance is a prerequisite for the successful completion of this programme. Participants will have to secure the minimum pass marks in the respective evaluation components.

# IIM Kozhikode Executive Alumni Status

Upon completion of the programme, participants will need to register with a registration fee to receive the prestigious IIM Kozhikode Executive Alumni Status .

# Programme Details

**Programme Fee** INR 1,75,000 + GST (Exclusive of Application Fee)

## Instalment Schedule

	Remarks	Amount
<b>Booking Amount</b>	Within 7 days of selection	INR 18,000 + GST
<b>Instalment I</b>	Jan 04, 2023	INR 26,000 + GST
<b>Instalment II</b>	May 05, 2023	INR 78,000 + GST
<b>Instalment III</b>	Sept 05, 2023	INR 53,000 + GST

## Round-wise Application Dates

	Application Fee	Dates
<b>Round 1</b>	INR 1,500 + GST	October 24, 2022
<b>Round 2</b>	INR 2,000 + GST	November 28, 2022

*Note: Admissions are on a first-come, first-serve basis. There might not be subsequent rounds if seats are filled in the initial rounds.*

# Programme Schedule

## Academic Orientation

January 14, 2023

## Live Online Sessions

3 Hours/ week

Saturday: 12:15 PM to 3:15 PM

For more information, please email us at: [iimk.execed@emeritus.org](mailto:iimk.execed@emeritus.org)

## Programme Application Link

[Click here](#) to apply to the programme.

## Finance options available.

[Click here](#) to learn more.

*Note:*

- The actual programme schedule will be announced closer to the programme start.
- In case a programme session corresponds with a public holiday, the session would be held on the following day.
- GST (currently @ 18%) will be charged extra on these components.
- Postage charges for books and study materials sent to locations outside of India will be paid for by the student

# Application Requirements

Applying to the programme? We suggest you keep the following 3 documents ready.

## 1. Your Photo ID Proof:

You can submit a scanned copy of PAN Card or the first two pages of your Passport.

## 2. Your Graduation/Degree:

You can submit a scanned copy of ANY ONE of: Degree certificate, provisional Degree certificate, marks transcript or score transcript.

## 3. Your Work Experience Certificate:

- You can submit scanned copy(ies) of document(s) which demonstrate that you have the minimum work experience required by the programme.
- You can confirm the minimum work experience requirement of a programme under the heading '**Eligibility**' in the brochure or the programme website.
- Examples of documents you can submit are joining letter, relieving letter, Bonafide work experience letter from your HR, salary slips etc.
  - These documents must be issued by your company.
  - Please ensure that the document(s) you submit contain a **date of joining** and a **date of leaving** or a **statement** about the **number of years** you have worked at the company.

# System Requirements

This programme includes live online classes. To attend a live online class you will need to have a PC/Laptop/Mac with



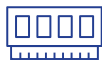
**Speakers and microphone:** built-in or a USB plug-in or wireless Bluetooth



**Webcam:** built-in or USB plug-in



**Processor:** with Dual Core 2Ghz or higher (i3/ i5/ i7 or AMD equivalent)



**RAM:** 4 GB or higher



**OS:** Either MacOS 10.7 or higher OR Windows 8 or higher



**An internet connection:** Minimum bandwidth of 3.0 Mbps (up/ down)



**Browser:** IE 11+, Edge 12+, Firefox 27+, Chrome 30+



**Zoom software client installed on your PC/ Laptop/ Mac**

We use the Zoom software application to conduct live online classes. Zoom works on a variety of PCs/ Laptops/ Mac systems and also on phones and tablets.

You can join your live online class from a phone or tablet if it supports the Zoom client.

We recommend that you attend classes from a PCs/ Laptops/ Mac.



# About IIM Kozhikode



IIM Kozhikode is ranked 5th as per the latest NIRF India Rankings 2022: Management. The Institute also made its global debut for its flagship MBA (101+ globally, 7+ in Asia) and EMBA programme (101+ globally, 15+ in Asia) in the 2020/21 QS World University Rankings. It is also ranked No.2 in the CFIs (non-Technical) category in the Atal Innovation Rankings (ARIIA 2021) released recently by the Ministry of Education, Govt. of India. IIM Kozhikode is globally accredited by EQUIS (EFMD) and AMBA (UK). Since its inception, IIM Kozhikode has successfully carved its niche in management education through a judicious blend of academics and real-world practice. The Institute continually adapts to the rapid influx of changes in the Indian business landscape by providing cutting-edge Management Development Programmes with innovative pedagogy and content to impart industry-relevant knowledge and skills to its executive education participants. Last year, IIM Kozhikode trained more than 3,400 executives through a wide gamut of programmes uniquely crafted for agile minds interested in thought-provoking questions and learning centred on business transformation and growth.

## About Emeritus

IIM Kozhikode is collaborating with online education provider Emeritus to offer a portfolio of high-impact online programmes. Working with Emeritus gives IIM Kozhikode the advantage of broadening its access beyond their on-campus offerings in a collaborative and engaging format that stays true to the quality of IIM Kozhikode. Emeritus' approach to learning is built on a cohort-based design to maximise peer-to-peer sharing and includes video lectures with world-class faculty and hands-on project-based learning. More than 250,000 students from over 160 countries have benefitted professionally from Emeritus' courses.

Apply for the programme here

**APPLY NOW**

For registration and any other information please get in touch with at [iimk.execed@emeritus.org](mailto:iimk.execed@emeritus.org)

 WhatsApp an advisor on +91 74120 81081\*

*\*Note: This number does not accept any calls. Please message your queries.*

In collaboration with



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