



Artificial Intelligence and Machine Learning for Business

September 23 – 28, 2024

Introduction

This programme is a mix of data analytics and optimization tools, and primarily covers the recent developments in the area of machine learning. It will have a strong focus on applications and working of the algorithms so that the participants get a thorough insight in the field of data science. The programme takes a practice-based approach for teaching concepts and tools that are needed for making data driven decisions in business. The participants in this course are expected to have a strong quantitative background to be able to finish the course successfully.

Objectives

The objective of the course is to introduce various methods from the domains of machine learning and optimization that will be useful to make business decisions when faced with large amount of data. The objectives of the course are as follows:

- Train the participants on handling both small and large amount of data and perform tasks such as classification and predictive modeling. The training will be useful in automating business operations decisions with the use of data.
- Train the participants on using important data analysis and optimization libraries that are available off-the-shelf.
- Give an insight to the participants on how datadriven ideas are being used to develop artificial intelligence technologies to enhance human potential and solve challenging problems using machines.

Content

Following are the concepts that will be covered during the programme.

- 1. Introduction to Python
- 2. Classification Techniques
- 3. Clustering Techniques
- 4. Dimensionality Reduction for Large Datasets
- 5. Neural Networks
- 6. Deep Learning
- 7. Generative AI
- 8. Applications of Analytics in Business

Prior preparation: A three-hour Python video tutorial customized for the participants will be shared before the start of the programme.

Applications

Following are the products that the participants will be trained on building during this programme:

- 1. A platform that assesses the credit worthiness of banking customers and automatically makes loan decisions.
- 2. A recommendation engine that identifies customer characteristics based on their past purchases and makes recommendations
- 3. Location clustering for routing of vehicles to efficiently provide service to customers in diverse localities
- 4. Sentiment analysis engine to make buy, sell and hold decisions for stocks based on the business news headlines
- 5. An object detection model capable of identifying objects and persons in images and videos
- 6. Development of applications using Generative AI models like ChatGPT, BLOOM, OPT, etc.

The codes/models/datasets for all the above products will be shared with the participants during the programme.

Pedagogy

- Case studies
- Lectures
- Computer Labs and Exercises

Faculty

Prof. Ankur Sinha (Faculty Chair)
Email: asinha@iima.ac.in



How To Apply

To register for the programme, fill in the application form through the link below:

https://bit.ly/3UwHRfE

The closing date for receiving applications is **September 9, 2024.** All applications are subject to review and approval by the programme faculty (usually after the due date for receiving applications). A formal acceptance letter will be sent to the selected candidates. For more information, please write to us at exed@iima.ac.in or call at +91 79 7152 6400.

Certificate

A Certificate of Participation will be awarded to the participants by IIMA. The participants should fulfil the requirement of 100% attendance in order to receive the certificate. Absence from any session needs to be with the prior approval of the Programme Faculty Chair.

Venue and Accommodation

The programme will be held at the Indian Institute of Management Ahmedabad. Participants would get full board and air-conditioned single room accommodation either on campus or with empanelled hotel partner.

IIMA norms do not allow participants to have guests staying with them during the programme.

Programme Fee & Payment

INR 2,25,000 plus GST per person for participants from India and its equivalent in US Dollars for participants from other countries. The fee includes tuition fee, programme materials, boarding and lodging.

The programme fee along with the application form should be received by the Executive Education Office latest by **September 9, 2024.**

In case of cancellations, the fee will be refunded only if a request is received at least 15 days prior to the start of the programme. If an application is not accepted, the fee will be refunded to the person/organisation concerned.



The programme fee can be paid in one of these two ways:

[A] Electronic Fund Transfer

- Name of Beneficiary: Indian Institute of Management Ahmedabad
- 2. Savings Bank A/c **IIMAHMOEP** HDFC Bank Limited, Ahmedabad Vastrapur Branch (IFSC Code: HDFC0000048, MICR Code: 380240003)
- 3. Name of Remitter: _____ (Please mention the name of the sponsoring organization)
- **4.** Purpose of Remittance: **Artificial Intelligence** and **Machine Learning for Business**
- 5. IIMA Permanent Account Number (PAN): AAATI1247F
- 6. IIMA Tax Deduction Account Number (TAN): AHMI00189A
- 7. IIMA GST Registration Number: 24AAATI1247F1Z4 (SAC: 999293)

After making the payment, please email us the complete transaction details immediately so that we can link your remittance with your nomination.

[B] Payment Gateway

For more information, please visit the respective programme on our website:

https://bit.ly/3Whabnz

Discount

Early Bird Discount: Applications received with payments on or before **September 2, 2024,** will be entitled to an early bird discount of 7%. Early submission of fee and application does not, however, guarantee acceptance of the application.

Group Discount: Any organisation sponsoring four or more participants will be entitled to a discount of 7% on the total fee payable provided that at least four participants actually attend the programme. Organisations can avail themselves of both the discounts subject to a maximum overall discount of 10%.

Any organisation sponsoring 25 or more participants across all the programmes in one academic year will be entitled to an overall discount of 15% on the programme fee payable.

The above discounts will be applicable only when the requisite numbers of participants actually attend the programmes.

Programme dates and fees are subject to change at the discretion of the Institute.

Indian Institute of Management Ahmedabad (IIMA)

IIMA was set up by the Government of India in collaboration with the Government of Gujarat and Indian industry as an autonomous institution in 1961. The Institute provides education, training, consulting and research facilities in management.

IIMA Alumni Association

Participants who are attending short-duration Executive Education Programmes for the first time, on or after April 1, 2012, will have to attend for a total of 21 days in one or more programmes in order to be eligible for alumni status and alumni identity card, both of which will be awarded on the payment of a one-time alumni fee of INR 10,000/-+ GST.

Major Programmes Offered by IIMA

- Two-Year Post Graduate Programme in Management (MBA)
- Two-Year Post Graduate Programme in Food and Agri-business Management (MBA-FABM)
- Ph.D. Programme in Management
- One-Year Full Time Post Graduate Programme in Management for Executives (MBA-PGPX)
- Executive Education offers short duration programmes through open enrollment, customisation and online for various levels of experienced professionals across industry
- Faculty Development Programme (FDP)
- ePost Graduate Diploma in Advanced Business Analytics (ePGD-ABA)
- Armed Force Programme (AFP)
- · Online MBA

The Institute has 103 faculty members working in the following management areas and centres:

Disciplinary Areas and Groups

- Centre for Management in Agriculture (CMA)
- Economics
- Human Resources Management
- Marketing
- Operations and Decision Sciences (O&DS)
- Ravi J. Matthai Centre For Educational Innovation (RJMCEI)
- Communication
- Finance and Accounting
- Information Systems
- Organizational Behaviour
- Public Systems Group
 - I) Strategy

Interdisciplinary Centres

- Arun Duggal ESG Centre for Research & Innovation
- · Ashank Desai Centre on Leadership and Organisational Development
- Brij Disa Centre for Data Science and Artificial Intelligence
- Centre for Digital Transformation
- Centre for Innovation Incubation & Entrepreneurship (CIIE)
- Centre for Management of Health Services (CMHS)
- Centre for Transportation and Logistics
- Gender Centre
- India Gold Policy Centre (IGPC)
- JSW School of Public Policy
- Misra Centre for Financial Markets and Economy (MCFME)

