

PG Diploma and --- MTech* in Artificial Intelligence

Indian Institute of Technology, Jodhpur



12 MONTHS
PROGRAM

IIT ALUMNI
STATUS

LIVE ONLINE

Sessions by IIT Jodhpur faculty and ex-
MAANG experts with Campus immersion

Apply Now 

Context of the Program

DEMAND FOR DATA SCIENCE AND AI PROFESSIONALS IS SOARING DON'T JUST WITNESS THE AI REVOLUTION, **JOIN IN!**

Artificial Intelligence is transforming business across all industries, from startups to large multinational companies and even public administrations. With the exponential growth of data, the potential to drive innovation and solve real-world problems has never been greater.

With the recent evolutions in AI and ML, following are some of the large-scale opportunity areas:



- **GenerativeAI (GenAI)**
 Transforming content search and summarisation, content generation.
- **Remote Work and Collaboration**
 Transforming the landscape of remote work and collaboration solutions which often rely on AI-enabled technologies
- **Contactless Solutions**
 Evolution of wide range of contactless solutions post-pandemic, such as AI-enabled self-service kiosks and chatbots which can help businesses improve customer experience.
- **Data-driven Decision making**
 AI is used to collect and analyse large quantities of data, which can then be used to make better decisions about product development, marketing, customer service, etc.
- **Increasing availability of AI-enabled Tools and Services**
 AI is used to collect and analyse large quantities of data, which can then be used to make better decisions about product development, marketing, customer service, etc.



ARE YOU READY TO TAKE THESE OPPORTUNITIES TO ACCELERATE YOUR CAREER?

The demand for skilled professionals in this space is skyrocketing.

- The World Economic Forum forecasts **58 million new jobs** in data science and AI by 2025.
- The global AI market is projected to reach a staggering **US \$422.37 billion by 2028.**
- The Indian AI market is expected to witness explosive growth, reaching **US \$7.8 billion by 2025.**

This translates to countless projects across diverse sectors, with companies actively seeking talent equipped with AI, ML, data science, and analytical skills.

The IIT Jodhpur M.Tech program equips you with the advanced skills and specialized knowledge to become a sought-after AI professional.

MORE REASONS TO BE A PART OF AI REVOLUTION:

1

Fast-Growing Field

One of the most fascinating and quickly-growing topics in modern times is artificial intelligence. It is at the forefront of technological development, and a wide range of industries, including manufacturing, transportation, healthcare, and entertainment, can use it. There are many job prospects as a result of the ongoing increase in demand for AI professionals.

2

High Demand and Competitive Salaries

There is a lack of qualified AI practitioners as a result of the demand for AI professionals surpassing the talent pool. For individuals who choose to enter the area, the lack of AI competence translates into competitive pay and alluring compensation packages. AI experts frequently have above-average pay and fantastic opportunities for professional advancement.

3

Global Significance and Effect

Artificial Intelligence is a global phenomenon, and its developments and uses are being investigated globally. Working on foreign projects and collaborating with individuals from other nations and cultures can be two of the many chances that a career in artificial intelligence can provide.

4

Continuous Career Growth

AI is still in its early stages, and the potential for career growth and professional development is immense. As you gain experience and expertise in AI, you can progress to more specialized roles, lead teams, engage in research, or even contribute to shaping the future of AI through academia or industry leadership positions.

About the — Program

PG Diploma and MTech in AI

This M.Tech in AI at IIT Jodhpur will offer students with deep knowledge of both fundamental AI technologies, as well as application-oriented AI. A student completing this program will be capable to undertake careers in industry as well as academia. He/She will have the option to explore a variety of domains including Manufacturing, Fintech, Healthcare, Agriculture/Food Processing, Education, Retail/Customer Engagement, Human and Robot interaction/intelligent automation, Smart City, Aid for Differently Abled/Accessibility Technology.

01 Cutting-edge Curriculum

IIT Jodhpur's M.Tech Program features an industry-integrated curriculum that focuses on emerging technologies, data analytics, and technology applications. The curriculum is regularly updated to keep pace with industry trends.

02 Industry Relevant Electives

The program offers a diverse array of electives under the M.Tech Program track. From Social Network Analysis, Principles of Biological Vision, Cyber Security, GPU programming, and Introduction to Blockchain, students can tailor their specializations to match their career aspirations in the dynamic field of technology.

03 Expert Faculty

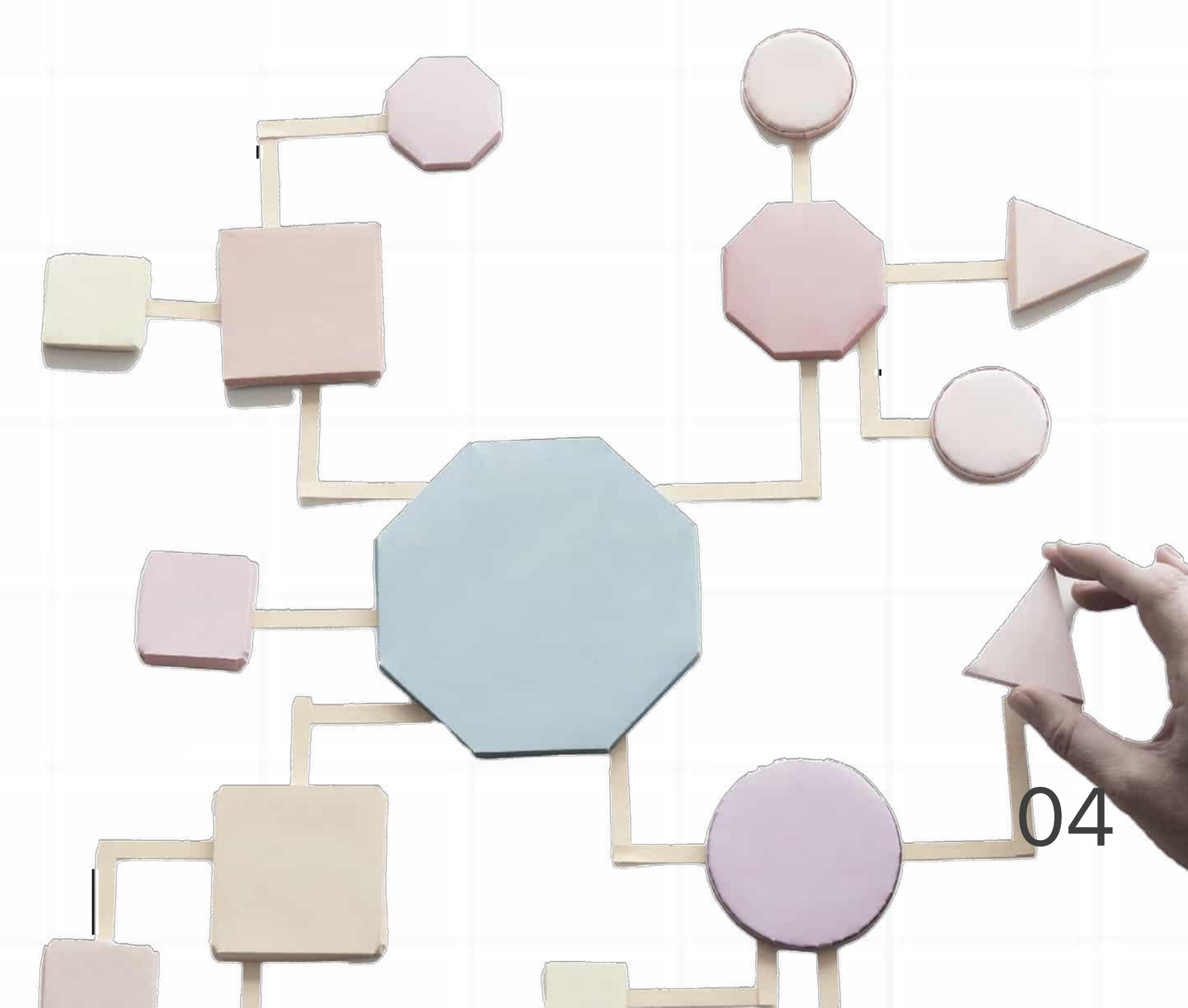
Learn from distinguished faculty comprising renowned IITJ Faculty, who bring in the best academic experiences into the classroom, nurturing as well as challenging students at the same time. The rigorous program with Multiple Assessments, Assignments and Examinations ensures a solid learning outcome.

04 Application Focused Learning from Top Industry Leaders

Gain insights on industry challenges, tech opportunities, and practical examples shared by key leaders while networking extensively within the industry.

05 Experimental and Immersive Learning

The program integrates industry use cases, mini-projects, assignments, and capstone projects. This hands-on approach ensures that students are well-prepared to apply their knowledge in real-world scenarios.



Who is the **Program for you**

The program is tailored for Tech Professionals or aspirants who want to build a career in AI, AI and ML Engineering, data analytics, ML, and similar evolving technologies.

It is also a perfect program for candidates seeking roles as Data scientist, ML Engineer, AI Research Scientist, AI Solutions Architect, Big Data Engineer, AI Consultant, and more.

Eligibility* For students who want to only pursue PGD in Artificial Intelligence

- Minimum **50%** marks in **Under-graduation**, or **Post-graduation**:
 - B. Tech Degree
 - B.Sc/ BCA+ M. Sc/MCA/Master's degree in science/or in a related field
- Minimum of **1 Years of Work Experience** is mandatory (after qualifying degree) at the time of registration to the program. (The applicant must qualify the pre-screen test to be eligible for the program)

Eligibility** For students who want to upgrade to M.Tech after PGD in Artificial Intelligence

- Graduation from a **4 Year Degree Program**:
 - B. Tech Degree
 - B.Sc/ BCA+ M. Sc/Master's degree in science
 - B.Sc/ BCA + MCA, or in a related field
- First division in **Under-graduation / Post-graduation**
- Minimum of **2 Years of Work Experience** is mandatory (after qualifying degree) at the time of registration to the program. (The applicant must qualify the pre-screen test to be eligible for the program)

*Students going only for PGD will not be allowed admission to M.Tech

**Admission to M.Tech program is subject to approval from the program directors.



Program — Highlights

NEXT - GEN CURRICULUM FOR A FUTURE-PROOF CAREER: DEEP INDUSTRY AND GLOBAL EXPERTS' INTEGRATION

- Cutting-edge curriculum built by industry experts and IIT-Jodhpur Faculty based on extensive studies on the needs of the industry
- Application-oriented approach along with case studies and project work

THE IIT DREAM

- Attain an M.Tech Degree from IIT Jodhpur
- Achieve IIT Jodhpur Alumni Status
- Become a part of IIT-J Alumni network
- Network with wide-ranging experts from tech industry

HYBRID AND HIGHLY EXPERIENTIAL LEARNING

- Live sessions every week
- Masterclasses by top industry experts bringing in use cases, applications, challenges and projects
- Campus immersion (20 days per year)

INDUSTRY-TETHER WITH FUTURENSE

- Fully Sponsored Futureense Bridge Course covering key foundational concepts
- Futureense Job Assistance



Program

Outcomes

Master the Fundamentals

Develop a solid foundation in various aspects of artificial intelligence, including Machine Learning, Inference Engines, Speech, Vision, Natural Language Understanding, Robotics, and Human-Computer Interaction.

Tackle Real-World Problems

Gain practical experience and proficiency in utilizing cutting-edge AI tools to solve real-world problems effectively.

Human Cognition and AI Development

Gain an understanding and appreciation of different models of human cognition and their relevance in the development of AI techniques and systems.

Building Robust AI Systems

Acquire engineering skills necessary for the creation of real-time and robust AI-based systems, including proficiency in specific software, hardware, and data requirements.

Solving Challenges with Cognitive Algorithms

Demonstrate the ability to undertake projects utilizing cognitive algorithms for stakeholder management, risk modeling, resource scheduling, and data modeling, thereby deriving valuable insights.

Developing Intelligent VR and AR Solutions

Develop the capability to construct solutions for exploring fully immersive virtual reality (VR) environments and implementing augmented reality (AR) overlays with intelligent cognitive functionalities.

Planning and Managing Technical Projects

Demonstrate proficiency in planning and managing technical projects, including the ability to organize resources, set timelines, and oversee project execution to achieve desired outcomes.



Expected —

Graduate Attributes

01

Comprehend fundamental concepts and hands-on knowledge of the state-of-the-art AI methodologies.

02

Design and Build real-world AI systems for complex planning, decision making and learning, solving application-specific problems, and to reason about them.

03

Conceive, Design and Develop Intelligent multi-modal multi-sensory Man-Machine interfaces.

04

Design, Develop and Deploy machine learning based applications using structured and unstructured data (e.g., speech, text, images/videos).

05

Understand and Assess reliability, dependability and trust-worthiness of AI-based systems.

06

Design and develop AI applications for resource constrained environments.

07

Adhere to evolving ethics and privacy laws across various domains and territories.

08

Plan and manage technical projects.

Student Journey



Submit your Application



Appear for the Pre-Screening Test and Interview



Pay the Application Processing fee



Receive your Offer Letter from IIT Jodhpur



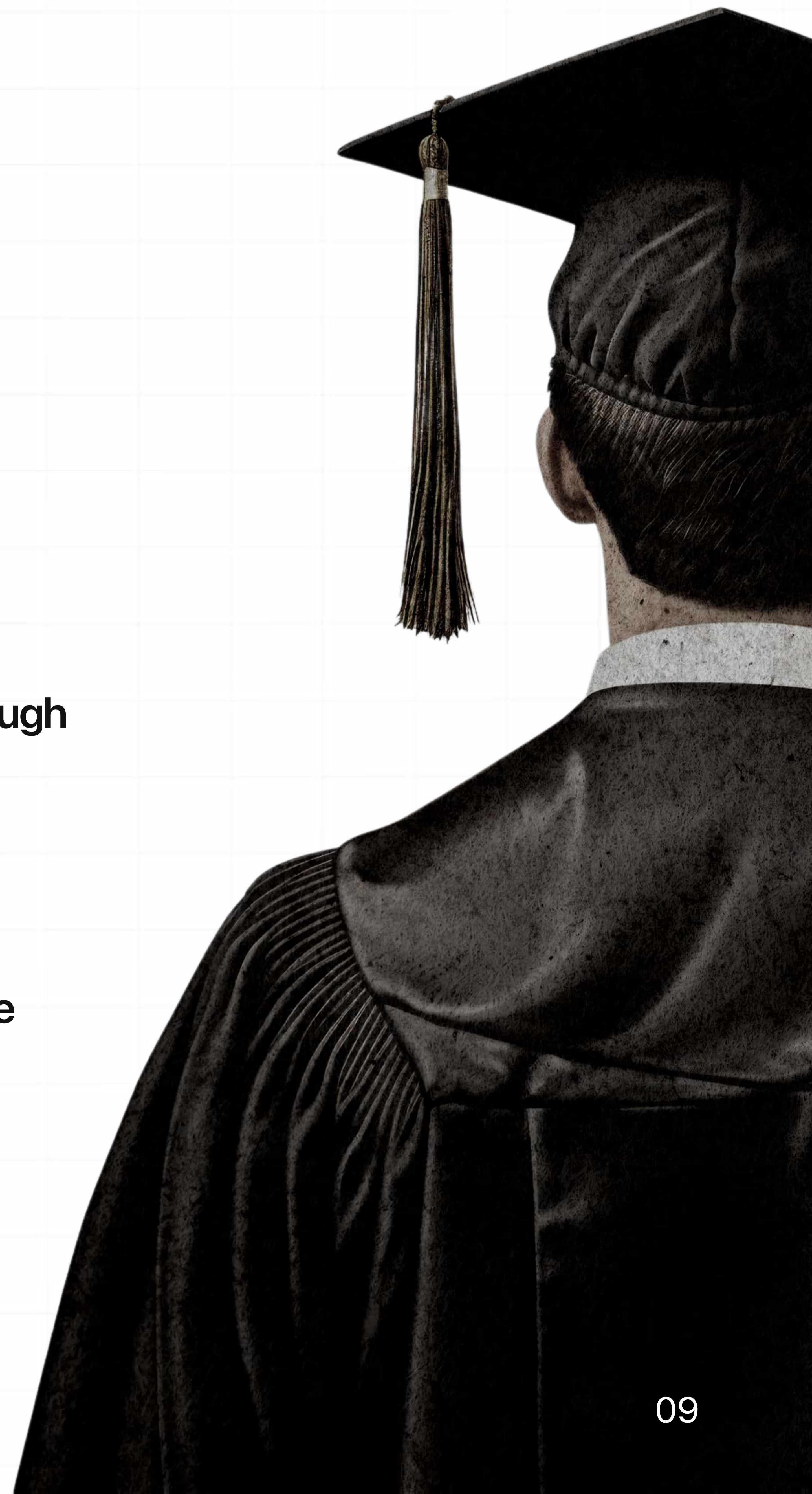
Strengthen your Foundations through Futureense Bridge Course



Begin your IIT Jodhpur PG Diploma Degree



Become an IIT Jodhpur PG Diploma Graduate



Post IIT-Jodhpur PG Diploma

Complete M. Tech Degree in Executive mode in 1 year!

Enhance your professional growth by leveraging your academic credits from the **PG Diploma Program** and transfer to **IIT Jodhpur's M. Tech program in executive mode** to unlock new career opportunities.*

Eligibility Criteria: Based on PGD performance and discretion of the Program Director.

Program Fee: INR 2,49,000**

For More Information: Office_cep@iitj.ac.in

Students have preferred opting for MTech degree after PG Diploma in Artificial Intelligence to enhance their career growth in several ways:

Deepens expertise for tackling complex Artificial Intelligence challenges with confidence.

Enhances job market competitiveness, favoring candidates with advanced degrees.



*T&C applies

**For PGD candidates who want to upgrade to MTech

Career —

Opportunities

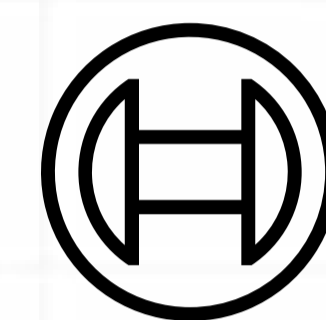
Potential Job Roles

As AI and Data Science continue to expand into various industries such as healthcare, finance, e-commerce, manufacturing, and many more, the number of job opportunities is limitless. With the growing demand for AI and data science skills, graduates with an MTech in AI and Data Science can expect to find rewarding career opportunities with competitive salaries and plenty of growth opportunities.

<p>AL Solutions Architect</p> <hr/> <p>AVERAGE SALARY</p> <p>₹36,75,000</p>	<p>AI Product Manager</p> <hr/> <p>AVERAGE SALARY</p> <p>₹29,95,000</p>	<p>AI Research Scientist</p> <hr/> <p>AVERAGE SALARY</p> <p>₹22,00,000</p>
<p>Quantitative Analyst</p> <hr/> <p>AVERAGE SALARY</p> <p>₹17,00,000</p>	<p>Data Scientist</p> <hr/> <p>AVERAGE SALARY</p> <p>₹14,00,000</p>	<p>ML Engineer</p> <hr/> <p>AVERAGE SALARY</p> <p>₹12,16,000</p>
<p>Big Data Engineer</p> <hr/> <p>AVERAGE SALARY</p> <p>₹10,60,000</p>	<p>AI Consultant</p> <hr/> <p>AVERAGE SALARY</p> <p>₹9,90,000</p>	<p>Data Engineer</p> <hr/> <p>AVERAGE SALARY</p> <p>₹9,49,800</p>
<p>Business Intelligence Analyst</p> <hr/> <p>AVERAGE SALARY</p> <p>₹8,50,000</p>		

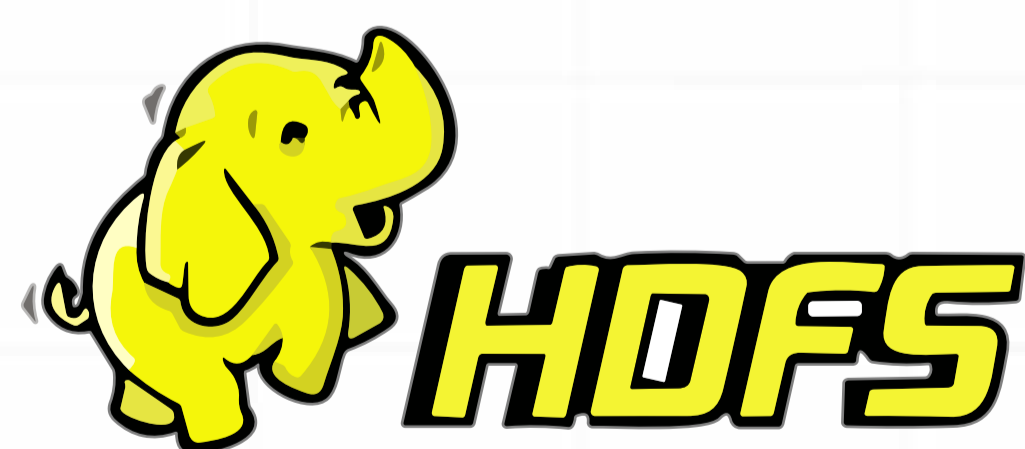
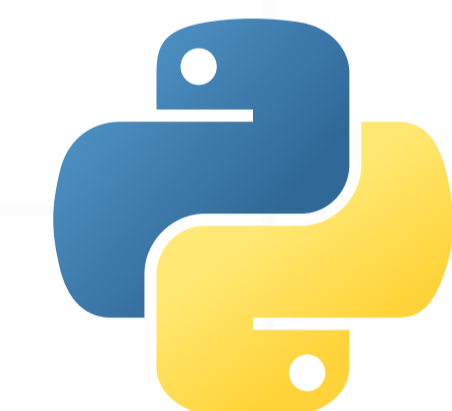
Potential Recruiters

World's leading companies are hiring for the most in-demand data job roles!



& more

Tools Covered



Curriculum

Year 1 (Three Trimesters)

Trimester 1

Course Name	Credits
Machine Learning	3
Artificial Intelligence	3
Optimization	2
Advanced Data Structures and Algorithms	2

Trimester 2

Course Name	Credits
ML-Ops	1
Deep Learning	3
DL-Ops	1
Program Elective 1	3
Intellectual Property	1
Technical Communication	1

Note: The electives list above is indicative. IIT Jodhpur is an institution of eminence in areas of emerging technologies and launches new courses dynamically every trimester. Therefore, the compulsory electives are updated on a regular basis and will be made available as per discretion of the faculty and Program Directors.

Trimester 3

Course Name	Credits
Advanced Artificial Intelligence/Autonomous System	3
Program Elective 2	3
Program Elective 2	3
Ethics and Professional Life	1

Year 2 (Two Semesters)

Upgrade to M. Tech degree after PG Diploma in Artificial Intelligence

Semester 4

Course Name	Credits
MTech Project 1	4
Program Elective 4	3
Program Elective 5	3
System Engineering and Project Management	1

Semester 5

Course Name	Credits
MTech Project 2	4
Open Elective 1	3

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Program Elective 6	3
MTech Project 3	8
Open Elective 2	3

Some Core and Elective Course Options

Core Courses	Elective Courses
ML-Ops	Social Network Analysis
Machine Learning	Principles of Biological Vision
Deep Learning	Advanced Artificial Intelligence
DL-Ops	Advanced Computer Vision
Artificial Intelligence	Autonomous Systems
Dependable AI	Introduction to Block Chain
Algorithms for Big Data	Natural Language Understanding
Ethics and Professional Life	Cyber Security
System Engineering and Project Management	GPU Programming
	Software and Data Engineering
	Introduction to Augmented Reality and Virtual Reality
	Advanced Biometrics
<p>Some Interdisciplinary courses (offered by Departments of CSE, EE, Physics and Mathematics, and School of Liberal Arts and Management & Entrepreneurship) registered by current Exec. M.Tech AI students.</p>	
Psychophysics	Statistical Models and Regression
Modern Communication Networks	Energy Economics and policy
Special Drives for Electric Vehicles	System Engineering and Project Management
	Quantum Machine Learning

Note: The electives list above is indicative. IIT Jodhpur is an institution of eminence in areas of emerging technologies and launches new courses dynamically every trimester. Therefore, the compulsory electives are updated on a regular basis and will be made available as per discretion of the faculty and Program Directors.

Career —

Opportunities

EXPERIENCE BEING AN IITIAN WITH CAMPUS IMMERSIONS

Campus immersion will be an essential element of the program experience, in which learners must attend the campus activities and sessions on campus (IIT Jodhpur campus) for 20 days in year. Campus immersion attendance is mandatory to earn the program certificate. Learners will get a live classroom experience, with the opportunity to meet and learn in person from the esteemed faculty at IT Jodhpur and engage in peer learning or presentations and project work.



Program —

Director



DR. SOMITRA SANADHYA

Dr. Somitra Sanadhya

Professor

Department of Computer Science & Engineering

Prof. Somitra Sanadhya is a renowned expert in cryptography, cybersecurity and AI. He is currently a Professor in the Department of CSE at IIT Jodhpur as well as the Dean - Digital Transformation and the Chief Information Security Officer at IIT Jodhpur. Prior to this, he was the Head of the Department of CSE at IIT Ropar. He has also served at Ashoka University and IIIT Delhi in the past. He has authored several peer reviewed research papers in reputed journals and conferences. His research interests lie in Cryptology, Security, Quantum Computation, Blockchains, and Cryptocurrencies. He completed his BTech from IIT Delhi and PhD from Indian Statistical Institute, Kolkata in 2009.



Global Experts and Tech Advisory Board



Dr. Jagdip Singh

AT&T Professorship, Professor
Department of Design & Innovation



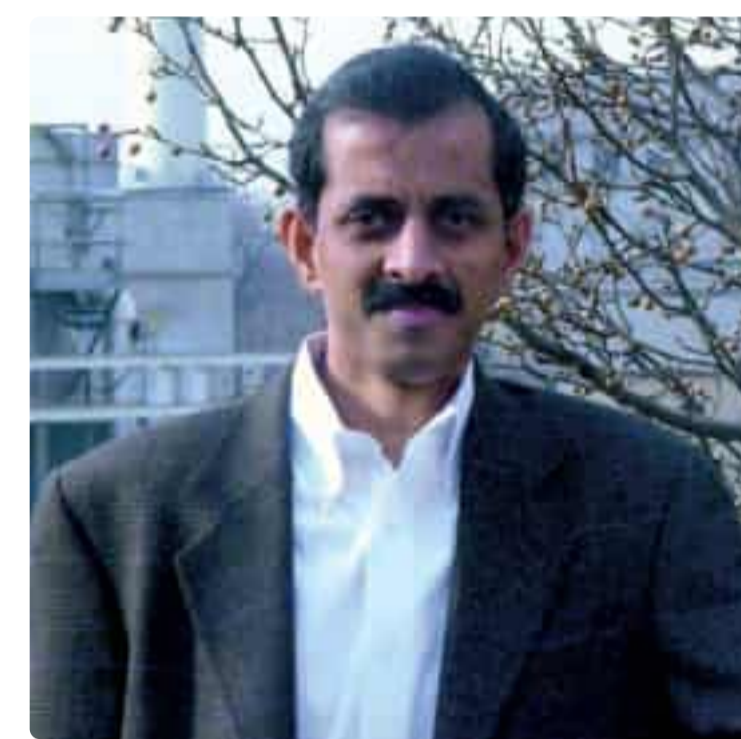
Dr. Kamlesh Mathur

Professor and Chair
Operations Department



Dr. Prashanth Southeikal

Managing Principal, Professor
Global Data and Analytics Author



Dr. Ganesh Mani

Distinguished Service Professor
Innovation Practice



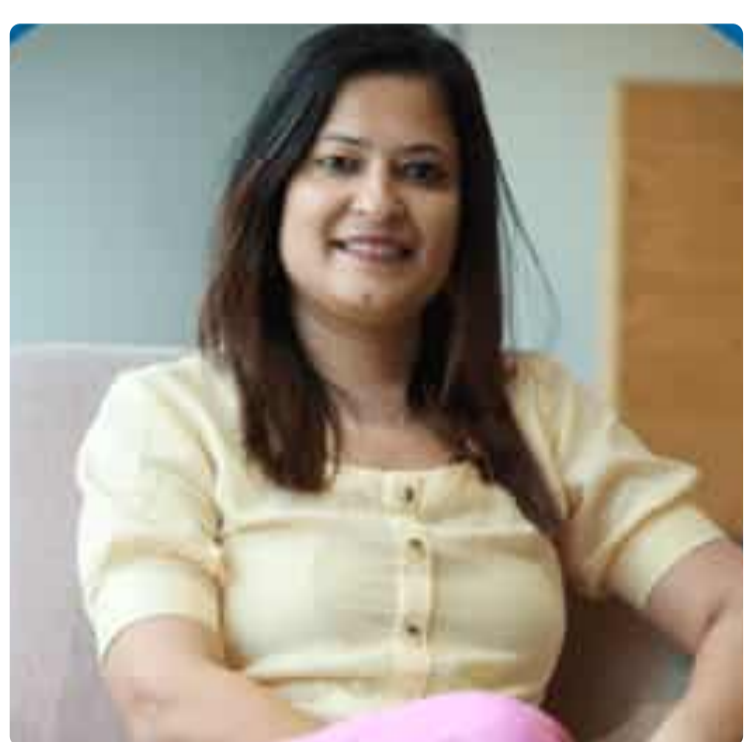
Dr. Sri Krishnamurthy

Founder
Global Computational and Quantitative Finance
and Fintech Consultant



David Fradin

Ex Apple, Product Management
CEO and Founder



Ishu Jain

Head of Central Analytics



Nishant Chandra

Azure AI – Principle/ Sr Director



Anees Merchant

Global Business Head
Applied AI and Research



Sasanka Panda

Head of Technology
GDC and Multi-Industry



Rohini Srivathsa

National Technology Officer
South Asia



Anshu Sharma Raja

Chief Transformation Technology
Operations Officer



Pankaj Rai

Chief Data and Analytics Officer



Philip Varughese Vayarakunnil

Global Head - Applied Intelligence
Platforms and Engineering



Program — Details

DURATION

12 Months

PROGRAMME COMMENCEMENT

26th July 2024

PROGRAMME FEE

Application Processing Fee: ₹10,000 (If the Application is not accepted by IIT Jodhpur or by Futureense, this amount will be refunded in full. However, if after acceptance of the Application, the student withdraws or drops out, for any reason whatsoever, this amount is strictly non-refundable)

Course Fee: ₹3,00,000

Administrative Fee: ₹15,000

The fees to upgrade to the second year of MTech depends on the terms and conditions, with an additional fees subject to approval by IIT Jodhpur.

Fees are subject to change based on the institute's current policy.

Includes lodging, Meals excluded

No GST applicable

No refunds post the last date of registration

TOTAL CREDITS

30

LEARNING MODE

Live Online Sessions


2 Campus Immersion (9-10 days each)

PROGRAM SCHEDULE

Friday, Saturday and Sunday

The class schedule will be determined by IIT Jodhpur and is scheduled to take place on Fridays (late evenings), Saturdays, and Sundays, subject to the availability of the faculty.

Admission — Process

01 —  — APPLICATION

02 —  — PRE-SCREEN TEST

03 —  — APPLICATION PROCESSING FEE

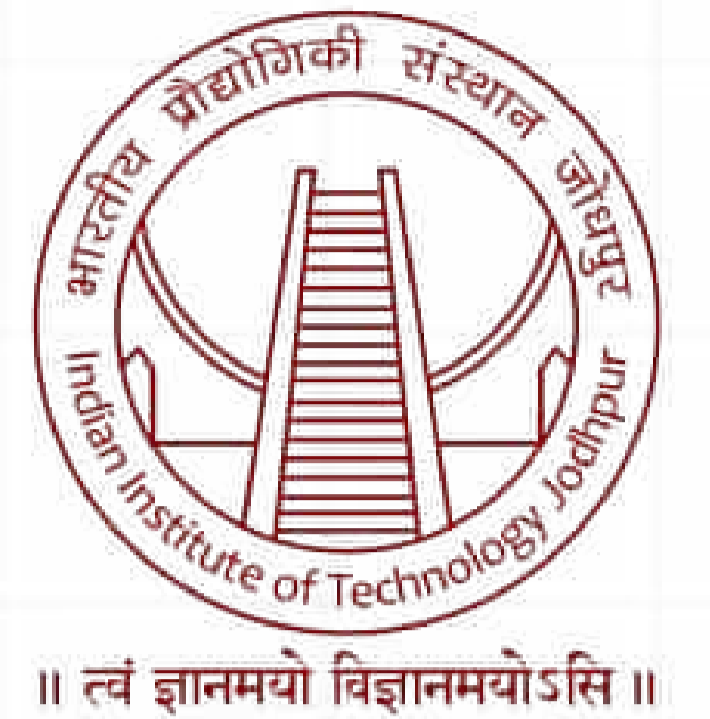
04 —  — SUCCESSFUL ENROLLMENT
AFTER FEE PAYMENT

05 —  — RECEIVE OFFER LETTER
FROM IIT JODHPUR



About —

IIT Jodhpur



The Indian Institute of Technology Jodhpur was founded in 2008 with a focus on technology education and research to promote the economic development of India. Its permanent campus is spread over 852 acres and has state-of-the-art facilities for research and academic activities. The institute is committed to a multidisciplinary approach to technology development and has organized its degree programs through departments and research activities through centers for technologies.

In addition to its focus on traditional education, IIT Jodhpur has been actively pursuing executive education programs for working professionals in India. The institute has been leveraging its academic expertise, industry collaborations, and infrastructure to create a range of high-quality programs that cater to the needs of today's professionals. Its faculty members, with extensive industry experience and academic expertise, bring a unique blend of theoretical knowledge and practical experience to the classroom.

To establish itself as a leader in executive education, IIT Jodhpur has been developing programs that are relevant and contemporary to the evolving needs of the industry. It has also established strong industry linkages to develop customized programs that cater to the specific needs of their employees. The institute has invested in state-of-the-art infrastructure, modern classrooms, well-equipped labs, a vast collection of books and research papers in the library, and online learning platforms and tools to provide an immersive learning experience to the participants.

About —

Futureense Technologies



At Futureense, we build next-gen technology talent that hold the key to a smarter and tech savvy future.

Futureense - The Godfather of Talent, is a new-age tech talent organization that provides an ideal platform for tech talent to unlock its true potential through its career-accelerating ecosystem and enables Fortune 500 companies to access an untapped talent pool.

With a mission to democratize the playing field for the tech talent of the country, Futureense, under its new initiative Futureense.uni, aims to transform tech education, together with top educational institutions in the country. Futureense leverages the well-established educational ecosystem of universities and combines it with its own next-gen outcome-focused approach through immersive learning experiences and building future-proof careers.

Let's get in Touch

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