

# New-Gen Al based Twin Degree Programme

# BS. / BSc. in Applied AI & Data Science

by IIT Jodhpur

# B.Tech. (CSE) / BCA

by Lingaya's Vidyapeeth

Gain in-demand Al skills Making you job-ready from day one

**Become a Citizen Power AI Expert** 



Indian Institute of Technology Jodhpur was established in 2008, to foster technology, education and research & development in India. The Institute is committed to human resource technology development for India. Scholarship in learning, commitment to research, engagement in creative accomplishments, and relevance to Industry are driving forces for us at IIT Jodhpur. Founded in 2008, Indian Institute of Technology Jodhpur (IIT Jodhpur) stands at the forefront of advancing technology education and research in India. IIT Jodhpur is driven by a mission to merge technological innovation with action - also leading the AI revolution in one of the country's most revered institutions.

Their core focuses are excellence in education, pioneering research, and industry relevance. IIT Jodhpur focuses on excellence in education and research, adopting a multidisciplinary strategy with cutting-edge labs for fundamental research and specialised Departments and Centers for Technologies.

With a forward facing approach on all forms of technological development, IIT Jodhpur is leading Artificial Intelligence and Data Science research in all dimensions: theoretical research, application directed research, and locally relevant research for meeting regional needs.

## **Campus**

IIT Jodhpur is successfully operating in its Permanent Campus on the National Highway 65 (NNE of Jodhpur towards Nagaur). The Permanent Campus is planned meticulously and envisioned to stand as a symbol of academics - simple, but deep.

# **Technology Park**

IIT Jodhpur is setting up an Incubation Centre and Technology Park on its campus to nucleate a cluster of new-age ventures. The focal theme for the Technology Park is AIOT - Artificial Intelligence of Things. The convergence of AI, IoT and 5G is ushering in AIOT. This next-generation technology is expected to impact all sectors of the economy. TECH PARK will host at least 30 companies at a time. The talented and experienced faculty and Research facility of IIT Jodhpur will be an integral resource of Tech Park.



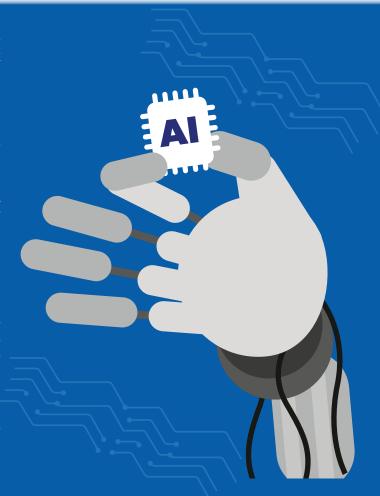
Lingaya's Vidyapeeth is a renowned educational institution dedicated to nurturing young minds and empowering them with knowledge, skills, and values. Established in the year 1998, our institution has a rich history of academic excellence and a commitment to fostering holistic development in students

The journey of Lingaya's Vidyapeeth began with a vision to provide quality education and contribute to societal advancement by producing leaders, innovators, and responsible citizens. Over the years, we have grown into a comprehensive university, offering a wide range of Undergraduate, Postgraduate, and Doctoral programs across various disciplines.

We focus on our students' overall development, creating a balance in providing them with equal opportunities in both academic and non-academic domains. To strengthen the pillars of our academic domain, we not only continuously update our curriculum but also boast of highly qualified and experienced faculty members who firmly believe in knowledge creation and dissemination.

# **Artificial Intelligence Path Ways**

- 1. Artificial Intelligence (AI) is reshaping the world as we know it. From automating routine tasks to solving complex problems, AI is not just an emerging technology—it's a foundational shift affecting every corner of the industry.
- 2. With the AI market size projected to surge to \$267 billion by 2027, growing at an annual rate of 33.2% (Forbes), the message is clear.
- 3. Al champions are those who harness its power to unlock new possibilities. Consider how Al in healthcare has not only slashed diagnostic errors by up to 50% but also trimmed operational costs by 30%. These are the winners of the Al era—individuals and businesses poised to lead with insight, efficiency, and agility.
- 4. The flip side is a stark reality where 75% of businesses risk sliding into irrelevance by ignoring Al advancements (McKinsey). The gap between the Al-savvy and the uninitiated is widening, turning the latter into bystanders in their industries.
- 5. The future belongs to those who prepare for it today. Al is not just a tool; it is a gateway to becoming a champion in your field.



# **Program Overview (Stackable Twin Degree Mode)**



# Year-1 CERTIFICATION (IIT Jodhpur and/or Lingaya's Vidyapeeth)

Year-2

## **DIPLOMA**

(IIT Jodhpur and/or Lingaya's Vidyapeeth)

Year-3 (Degree)

B.Sc (IIT Jodhpur)

BCA (Lingaya's Vidyapeeth)

Year-4 (Degree)

BS. (IIT Jodhpur)

B.TECH(CSE) (Lingaya's Vidyapeeth)





# **Program Highlights**

## IIT Degree And Alumni Status

Fulfill your dream of being an IITian with a globally recognized Bachelor's degree. Gain access to top companies like Microsoft, Google, Meta, and more. With the IIT badge, become part of a lifelong network of industry leaders.

## Stackable Twin Degree Model

Pursue a stackable certification-diploma-degree model aligned with the National Education Policy. Earn a Certification after Year-1, a Diploma after Year-2, and twin BCA / B.Sc Degree after Year-3. An optional BS. Degree after Year-4 along with B.Tech (CSE) from Lingaya's Vidyapeeth.

### Blended Learning And Multi-Lingual Teaching

Learn asynchronously from top IIT faculty during weekdays and participate in live sessions with expert practitioners in your language. Gain hands-on experience through industrial expertise sessions. Master over 100 cutting-edge AI tools and become an AI power user. Progress from entry-level roles to specialized domains like Data Science and NLP. Learn secret AI tools like Devin AI, Claude, and more.

#### Masterclasses By Industry Experts

Gain insights from CXOs and MAANG Leaders through masterclasses. Learn real-world experiences and cutting edge practices.

## Direct Pathway To Masters

Post your BS degree, get the opportunity to enroll in Masters at IITs and Top US Universities without entrance exams. This pathway is a testament to the quality and rigor of our B.S program.

### Technology-Driven Learning

Experience state-of-the-art virtual studio learning. Engage with dynamic visual elements, graphics, and animation to enhance your learning journey.

#### Criteria Of Eligibility

- 12th pass-outs with at least 60% in +2 Board exam\* (Should have Mathematics as one of the subjects in +2)
- Individuals willing to pursue an add-on Degree alongside their primary degree
- Working professionals seeking to upskill and get a degree in Applied Al



This is Your Moment to Act!





# Why pursue a Twin degree with IIT Jodhpur & Lingaya's Vidyapeeth?



- With this twin degree program -You will be a part of one of the most elite student communities in India of IITians.
- You will earn a BS./BSc. Degree from IIT Jodhpur apart from B.Tech (CSE) / BCA from Lingaya's Vidyapeeth
- Post completion, you will be eligible for an IIT Jodhpur Alumni Status, & reap all the benefits of a traditional IIT.

Obtain a Bachelor's Degree from the largest Deemed to be University in NCR Delhi accredited by NAAC

## Obtain an Add-on Degree from IIT Jodhpur



#### **Compare Your Twin Degree Program with Other Options:** Benefits @ IIT & **Twin Degree 4-Year Full Time Program** Lingaya's Vidyapeeth @ Lingaya's Vidyapeeth Degree Engineering/Science Both IIT Jodhpur & Lingaya's Vidyapeeth Twin Degree 4 years/ 3 years IIT Lab Sessions & Lingaya's Hand Hold by Lingaya's **Practical Training** Normal Labs Sessions Vidyapeeth (Upto 4 years) Vidyapeeth & IIT Jodhpur Teaching & Learning delivery by Lingaya's Vidyapeeth, IIT & Eminent National & Inernational Experts from National & International Exposure, Integrated into Institutions the curriculum, Internships, Student Experience Usual Teaching & Learning Selected courses jointly delivered Placements, IIT & Lingaya's by Lingaya's Vidyapeeth & IIT faculty Vidyapeeth Alumni • On Campus immersion at IIT Jodhpur every Year (Optional) Approximate Cost of Rs, 10,20,000 (B.Tech) Lesser than 4 years B.Tech/3 Year B.Sc Twin Degree @ Min Price Undergraduate Degree Rs. 8,00,000 (B.Sc)

# Why Pursue a IIT Jodhpur & Lingaya's Vidyapeeth Twin Degree Program?



# **Career Opportunities : Future Prospects**

# Al Engineer

Design and develop AI solutions.

YOU BACK

## **Data Scientist**

Analyze complex datasets & derive insights.

# **Machine Learning Engineer**

Create intelligent models for automation.

# **Business Intelligence Analyst**

Help companies make data-driven decisions.

## Researcher in AI: Data Science

Contribute to cutting-edge AI research.

# **Data Engineer**

Build and manage large-scale data systems.

# IIT Jodhpur & Lingaya's Vidyapeeth Twin Degree : Benefits

Internship Opportunities

Gain real-world experience with industry leaders

International Exposure

Collaborate with global AI & Data Science communities

Industry Expert Mentorship

Learn directly from AI professionals

Business Database Systems Development

Hackathons; Al Competitions

Participate in global AI challenges

Focuses on Business Database & Data Warehousing

State-of-the-Art Al Labs

Work with cutting-edge AI tools & technologies

# **Program Details (Year 1 to Year 4)**

## Year 1 to 4 (4 Years)

Campus





भारतीय प्रौद्योगिकी संस्थान जोधपुर Indian Institute of Technology Jodhpur

Registration Status

- Student registered with IIT Jodhpur & Lingaya's Vidyapeeth
- Student ID created by IIT Jodhpur & Lingaya's Vidyapeeth
- Alumni Status of both IIT Jodhpur & Lingaya's Vidyapeeth

Faculty

Knlowledge and Skill delivery by the Faculty of IIT Jodhpur & Lingaya's Vidyapeeth

Student Support

- Orientation IIT Jodhpur & Lingaya's Vidyapeeth
- Virtual Labs IIT Jodhpur & Lingaya's Vidyapeeth
- Academic Advising and Mentoring IIT Jodhpur & Lingaya's Vidyapeeth

IT on Campu Experience (Optional)

IIT Jodhpur On Campus Immersion Program for 4 days with a focus on developing leadership skills and learning

Hostel

Lingaya's Vidyapeeth

# How would your week look like?

# Typical Week of Students (IIT Jodhpur & Lingaya's Vidyapeeth) Monday Tuesday Wednesday Thursday Friday Saturday Sunday Lingaya's Vidyapeeth Lecture & Labs Sessions, Quizzes & Assignments Self-Paced Learning with Videos Lectures, Quizzes & Assignments LIVE online lectures by IIT Jodhpur Faculty & Industry Practitioners Masterclasses from CXOs & MAANG Industry leaders Assessments & Projects

# Comparison between Traditional B.Tech & Twin Degree Program

Traditional Learning Model	World's First Al-Driven Undergraduate Twin Degree B.Tech. (CSE) / BCA from Lingaya's Vidyapeeth & BS. / BSc. from IIT Jodhpur
Earn a regular Bachelor's degree	Earn an IIT Bachelor's degree and prestigious alumni status
Become a generic engineer when you graduate	Stand out with India's only Al-driven undergraduate program
Invest time in writing assignments and mundane exercises	Learn current-gen skills like content creation and build your portfolio
M.Tech degree via GATE only	Direct Admission to PGD and M.Tech by IIT Jodhpur without GATE post your BS degree (provided you have scored above 60% in BS & completed 2 years work experience)
No global immersion or study abroad opportunities	Study abroad with global immersions through Futurense US Pathway post your BS degree
Limited industry professors	Trained by top IIT faculty & leading industry experts

# Who is this Program For?

## 12th pass-outs with at least 60% in +2

(Should have Mathematics as one of the subjects in +2)

Individuals willing to pursue a another degree alongside their primary degree

## **Placement Assistance**

# Profiling

We will understand your expertise & help you craft the perfect profile.

# Interview Preparation

We have devised exclusive Interview Prep Mini Courses & mock interviews just for you

# Job Role Mapping

We will align your profile with the job role that's just perfect for both you & the employer.

# Feedback & Review

We gather feedback from interviewers & provide timely reviews to make your candidature 10x better

# **Student Career Pathways**

# Masters from IIT Jodhpur & Lingaya's Vidyapeeth

POST GRADUATION YOUR FUTURE IS SECURE WITH 3 STELLAR OPTIONS

- Seamlessly transition to M.Tech in Data Engineering at IIT Jodhpur
- Enrollment in prestigious programs, no GATE examination required
- Equip yourself with skills demanded by global industries for leadership in the digital era

# Study Abroad Post Your Twin Degree

- Pursue Master's at over 50 esteemed US universities, including DePaul, Rutgers, & Drexel
- Choose from diverse STEM-designated specializations
- Benefit from a 3-year OPT post-completion of your Master's program in the US

## Placement Assistance

- Lingaya's Vidyapeth extensive expertise in understanding of job role competencies through its network of Fortune 500 companies, unicorns, and startups
- · Access exclusive career opportunities tailored to match your skills and aspirations

# Curriculum

# Course Matrix BS. / BSc. Applied Al And Data Science

Year	Semester	Course Name	Job Roles
	1	Linear Algebra and Numerical Analysis     Foundations of Statistics and Probability     Algorithmic Thinking and Its Applications     Basics of Data Analytics	Al Powered Office Assistant     Data and Research Analyst
	2	Numerical Optimization     Foundations of Al     Visualization and Storytelling with Data     Generative Al tools	Junior Business Analyst
	3	Pattern Recognition Principles     Machine Learning     Al Programming     Generative Al	Data Analyst     Data Engineer
II	4	Machine Learning Applications     Basics of Data Mining     Foundations of Data Engineering     Tools for Data Science	Junior Data Scientist
	5	Machine Learning 2 (Deep Learning)     Foundations of NLP     Computer Vision     Data Security and Ethics	Domain Al Application Job     NLP Application Engineer
III	6	Machine Learning Applications (Domain based use cases)     LLM and Prompt Engineering     Reinforcement Learning	<ul><li>Computer Vision Application</li><li>Engineer</li><li>Data Scientist</li></ul>

# **Year 4 Career Track 1: Applied Al Career Path**

	7	Project Management Principles     Software Engineering     Design Thinking and Complex Problem Solving	Al Application Engineer     Generative Al
IV	8	Live Project - Applied Al Capstone Work     Product	Application Engineer

# Year 4 Career Track 2: Computational Science Research Path

<b>T</b> 7	7	Probability and Statistics     Linear Algebra     Calculus and Optimization     Programming, Data Structures and Algorithms		
V	8	Database Management and Warehousing     Machine Learning     Al     Thesis	Research Track	

# Curriculum

# **Course Matrix BCA - (6 Semester Program)**

# SEMESTER-1

Programs	Credits
Mathematics-I	4
Mathematical Concepts of Al & Data Science	3
Algorithm Design & Analysis	3
Exploratory Data Analysis	3
Engineering Physics & Chemistry	4
Problem Solving using C	4
Problem Solving using C Lab	1
IDEA Lab Workshop	2

# **SEMESTER-2**

Programs	Credits
Mathematics-II	4
Fundamentals of Artificial Intelligence	3
Data & Visual Analytics in Al	4
Introduction to Generative AI Tools	3
Object Oriented Programming C++	4
Microprocessor & Microcontroller	4
Object Oriented Programming C++	1
Microprocessor & Microcontroller Lab	1

# **SEMESTER-3**

Programs	Credits
Pattern Recognition	4
Introduction to Machine Learning	4
Programming Essentials for AI	3
Generative AI	4
Database Management Systems	3
Operating System	4
Database Management Systems Lab	1
Operating System Lab	1

# SEMESTER-4

Programs	Credits
Optimization Techniques in Machine learning	4
Data Mining & Data Warehousing	4
Fundamentals of Data Engineering	3
Tools for Data Science	4
Java Programming	3
Computer Networks	4
Java Programming Lab	1
Network Programming Lab	1

# SEMESTER-5

Programs	Credits
Deep Learning	4
Natural Language Processing	4
Computer Vision	3
Data Security and Ethics	4
OOAD using UML	4
Web Technologies	3
OOAD using UML Lab	1
Web Technologies Lab	1

# SEMESTER-6

Programs	Credits
Advanced Machine Learning	4
Prompt Engineering	3
Robotics process Automation	4
Applied AI	4
Big Data Analytics	4
Cryptography & Network Security	3
Software Development Lab	1
Mongo DB	1

# Curriculum

# Course Matrix B.Tech. (CSE) - (8 Semester Program)

# SEMESTER-1

Programs	Credits
Mathematics-I	4
Mathematical Concepts of Al & Data Science	3
Algorithm Design & Analysis	3
Exploratory Data Analysis	3
Engineering Physics & Chemistry	4
Problem Solving using C	4
Problem Solving using C Lab	1
IDEA Lab Workshop	2

## **SEMESTER-3**

Programs	Credits
Pattern Recognition	4
Introduction to Machine Learning	4
Programming Essentials for Al	3
Generative AI	4
Database Management Systems	3
Operating System	4
Database Management Systems Lab	1
Operating System Lab	1

# SEMESTER-5

Programs	Credits
Deep Learning	4
Natural Language Processing	4
Computer Vision	3
Data Security and Ethics	4
OOAD using UML	4
Web Technologies	3
OOAD using UML Lab	1
Web Technologies Lab	1

# SEMESTER-7

Programs	Credits
Project Management Principles	4
Software Engineering	4
Design Thinking & Complex Problem Solving	4
Internet of Things	3
Minor Project	5
Professional Skills	2
Professional Ethics	2

# SEMESTER-2

Programs	Credits
Mathematics-II	4
Fundamentals of Artificial Intelligence	3
Data & Visual Analytics in Al	4
Introduction to Generative AI Tools	3
Object Oriented Programming C++	4
Microprocessor & Microcontroller	4
Object Oriented Programming C++	1
Microprocessor & Microcontroller Lab	1

# **SEMESTER-4**

Programs	Credits
Optimization Techniques in Machine learning	4
Data Mining & Data Warehousing	4
Fundamentals of Data Engineering	3
Tools for Data Science	4
Java Programming	3
Computer Networks	4
Java Programming Lab	1
Network Programming Lab	1

# **SEMESTER-6**

Programs	Credits
Advanced Machine Learning	4
Prompt Engineering	3
Robotics process Automation	4
Applied Al	4
Big Data Analytics	4
Cryptography & Network Security	3
Software Development Lab	1
Mongo DB	1

# **SEMESTER-8**

Programs	Credits
Major Project/Internship	18
Seminar & Dissertation	2

# **Optimisation of Student Workload**

In order to optimise the workload on the students of twin degree programmes with IIT-Jodhpur, Lingaya's Vidyapeeth shall transfer credits from BS./B.Sc programmes of IIT-Jodhpur to B.Tech (CSE) / BCA programmes of the Vidyapeeth as per UGC policy. Accordingly, the workload on the students enrolled in the twin degree programme shall be restricted to a maximum of 160% instead of 200% required in obtaining twin degrees.

# **Fee Structure**

# B.Tech. (CSE) / BCA and BS. / BSc. in Applied Al and Data Science

## The Fee shall comprise of two components :-

- a) Programme Fee for BS./BSc. payable to IIT, Jodhpur
- b) Programme Fee for B.Tech (CSE) / BCA payable to Lingaya's Vidyapeeth

## For Details, Please Visit :-

IIT Jodhpur Website:- https://www.iitj.ac.in

Lingaya's Vidyapeeth Website:- https://www.lingayasvidyapeeth.edu.in



# **Eligibility Requirements**

Twin Degree: B.Tech (CSE) / BCA at Lingaya's Vidyapeeth and BS. / BSc. in Applied Al and Data Science

# **Eligibility**

- 1. All candidates who have a minimum score of 60% in the 10+2 examination with Math as one of the papers will be eligible for applying for the program.
- 2. The candidate also has to pass a Qualifier Exam conducted by IITJ with support from Futurense, to be eligible for the program.
- 3. If a candidate does not have the prerequisite 60% score in 10+2 board examination, but has qualified for JEE Main examination, the candidate will be eligible to apply for the program.

# **Application Journey**



# **Admission Process & Program Structure**

# **Admission Process for 2025-26**

Admission Procedure	Program Structure
	Duration: 3-4 Years (Based on credits & specialization
	• Eligibility: 12th Pass (PCM/PCMB preferred)
	Mode: Hybrid Learning (Live Online + On-Campus Sessions)
	• Intensive AI: Data Science Bootcamps
Let us Get in Touch	Specialized Electives: Choose from Al Ethics, Robotics, NLP & more.
	Capstone Projects : Research Opportunities
	Internship : Placement Support
	Certifications : Industry-Endorsed Credentials

# **IIT Jodhpur Placement Statistics 2024**

A total of 255 undergraduate engineering students accepted the job offers in the year 2024. The average placement percentage stood at 91.30% for B.Tech programmes.

# Placements at IIT Jodhpur 2023-2024

Course Name	Students accepting placement offers	% of placements offers
Computer Science & Engineering	100	98.03 %
Electrical Engineering	71	95.94 %
Mechanical Engineering	56	88.88 %
Bio Engineering	28	82.35 %

# **Highest Salary Package at IIT Jodhpur 2023-24**

Course Name	Highest Package (LPA)
Computer Science & Engineering	53,00,000
Electrical Engineering	51,00,000
Mechanical Engineering	51,00,000
Bio Engineering	48,00,000

# **Average Salary Package at IIT Jodhpur 2024**

Course Name	Average Package (LPA)
Computer Science & Engineering	26,31,000
Electrical Engineering	22,00,000
Mechanical Engineering	19,50,000
Bio Engineering	18,65,000

# **Placements 2024- Major Participating Companies**





# **IIT JODHPUR**

(NH 62, Surpura Bypass Rd, Karwar, Jheepasani, Rajasthan 342030) https://www.iitj.ac.in





# **LINGAYA'S VIDYPAEETH**

(Nachauli, Jasana Road, Faridabad, Haryana-121002) https://www.lingayasvidyapeeth.edu.in

