



Indian Institute of Technology Jammu's

M.Tech in Generative AI & Data Science

(Executive)

India's First M.Tech integrating **Generative AI & Data Science** for Working Professionals

Duration

2 Years

Fee

₹4.49 Lakhs

Start

September 2026
(Tentative)

Format

**Weekend Live Classes +
Campus Immersions**



भारतीय प्रौद्योगिकी
संस्थान जम्मू
INDIAN INSTITUTE OF
TECHNOLOGY JAMMU

विद्यया च सर्वथा प्रथमम्

Based on the 2026 Curriculum

Admissions &
Industry Partner

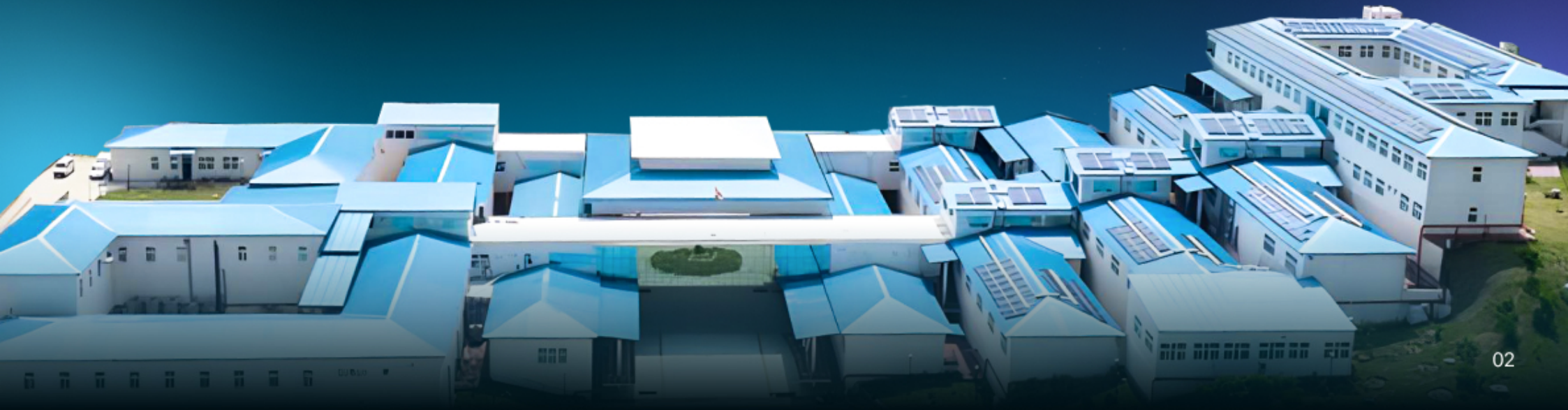


FutureSense



What's Inside

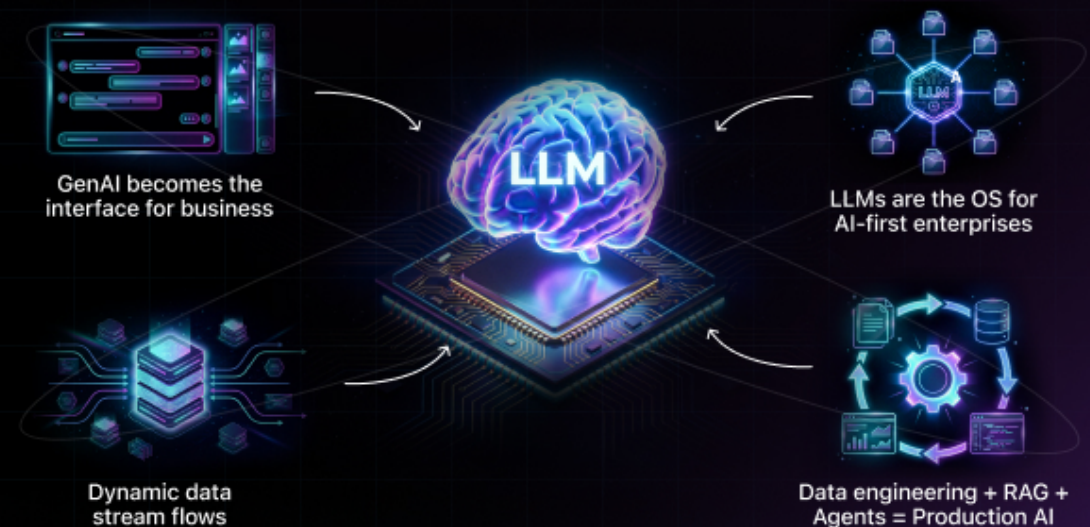
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Context of the Program

AI and Data Science is now moving from experimentation to **Full-scale Adoption**, and the biggest shift is happening in **Generative AI and Data-Centric Systems**. Industries today need engineers who can **Build AI agents, deploy LLMs, Manage data pipelines, and integrate AI into real products**, not just train models.

- **GenAI** is becoming the new interface for **Data Science and Business Operations**
- **LLMs** are evolving into the operating system for **AI-first enterprises**
- **Data Science + RAG + Agents** are now the backbone of production-grade AI
- Companies need **Engineers who Understand Systems**, not just algorithms



Today's AI Products Require:

- AI Agents with memory, tools, autonomy
- Context engineering, retrieval pipelines, and production MLOps
- Scalable data systems to power AI workflows
- Strong foundations in ML, DL, and advanced computational techniques

IIT Jammu's **M.Tech** in GenAI & Data Science prepares you to **build next-generation AI systems**, from LLM-powered automation to enterprise-grade data platforms, equipping you for the fastest-growing roles in the industry.



India's AI Revolution & Your Career Opportunity

India is entering its **Largest AI Investment Phase** ever, driven by the Government's **IndiaAI Mission (2024-2030)**, a national initiative to build indigenous datasets, AI models, and compute infrastructure at scale.

The IIT Jammu **M.Tech** in Generative AI and Data Science curriculum is designed to help build expertise to contribute and drive this mission.

IndiaAI Mission Highlights (As recently announced by the Government of India & PM Modi)

- Deployment of **10,000+ GPUs** for India's AI compute stack
- Creation of **India's First Large-scale Public Datasets** across sectors
- **80 IndiaAI Labs** to advance AI research and innovation
- Funding for **25 Deep-tech Startups** building AI products for India
- Development of **India's Own Large Language Models (LLMs)** for multilingual and low-resource environments

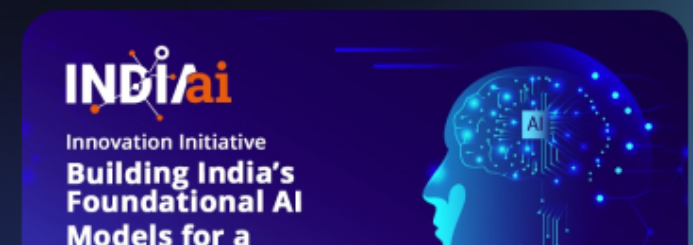
Contribute to the Mission of Building:

- Multilingual AI (22 official languages, 1000+ dialects)
- AI for healthcare, agriculture, governance, and financial inclusion
- Public-scale systems for 1.4 billion people
- Ethical, low-cost, accessible AI solutions



AI will create lakhs of new opportunities for the youth and position India as a global AI innovation hub.

~ *Narendra Modi*
Prime Minister of India





Program Overview

India's First M.Tech in Generative AI & Data Science

While various **M.Tech** programs in General AI or Data Science exist, IIT Jammu's has designed **India's First and Only M.Tech Specifically Focused on Generative AI and Agentic AI Systems.**

DEGREE

M.Tech in Generative AI & Data Science (Executive) by IIT Jammu

FORMAT

Weekend Live Classes + Campus Immersions

SCHEDULE*

Saturday / Sunday
(Timings Depend on the IIT Faculty)

SELECTION

Prescreening Test + Interview (Online Mode); GATE Score Optional

DURATION

2 Years
(4 Semesters, 60 Credits)

FACULTY

100% Core Curriculum by IIT Jammu Professors

ALUMNI

IIT Jammu
Executive Alumni Status



*Class timings will be finalized based on the availability of the IIT faculty.



Curriculum Snapshot

60-credit Program Following the 2026 Curriculum

Core Courses

21
CREDITS

FOCUS

AI, ML, DL, NLP, Computer
Vision

Electives

21/15
CREDITS

FOCUS

GenAI, MLOps, Agentic AI,
Data Engineering

Project/Dissertation

18/24
CREDITS

FOCUS

Original Research or
Project Track

Total

60
CREDITS

FOCUS

2 Years
4 Semesters

* Curriculum is tentative and may be changed based on PD discretion and industry dynamics.



Semester 1 | 12 Credits, Core Foundation 1

AI & ML Foundations

Course	Credits	Type
Programming for AI and Data Scienc	3	Core
Data Analytics for AI	3	Core
Foundation for Machine Learning and Deep Learning	3	Core
Artificial Intelligence and Computational Intelligence	3	Core

What You Master

- **Mathematical Foundations:** Statistical inference, Bayesian reasoning, PCA, discriminant analysis
- **Production Python:** Vectorization, OOP, testing frameworks, algorithm complexity
- **AI Fundamentals:** Search algorithms, knowledge representation, evolutionary computation, backpropagation calculus
- **Pattern Recognition:** Classification theory, fuzzy systems, clustering with mathematical derivations

Tools & Tech Stack



- **Build:** Bayesian classifier, PCA implementation, fuzzy controller, genetic algorithm

* Curriculum is tentative and may be changed based on PD discretion and industry dynamics.



Projects and Case Studies

PROJECT 1

TALENTGRAPH

Semantic Skill Mapping Engine

Core Idea:

Probabilistic graphical models + semantic embeddings to build skill graphs that understand "React → JavaScript → Frontend → UI/UX" relationships, enabling fuzzy talent matching that keyword-based ATS systems miss.

GenAI Stack:

OpenAI Embeddings API | Structured JSON outputs for skill taxonomy | Few-shot prompting for entity extraction | Claude API for ambiguity resolution

COMPLEXITY ★★☆☆☆

04 Sprints

PROJECT 2

POLICYLENS

Regulatory Compliance Checker

Core Idea:

Rule-based expert systems + LLM reasoning to encode RBI/SEBI/GDPR as logical predicates, bridging legal text to machine-executable compliance rules.

GenAI Stack:

GPT-4 for clause interpretation | System prompts encoding regulatory logic | Temperature=0 for deterministic compliance decisions

COMPLEXITY ★★☆☆☆

03 Sprints

Case Studies

Reverse Engineer

Learn matrix factorization, alternating least squares, and implicit feedback modeling through dissecting Netflix's pre-deep-learning recommendation engine—the system that won their \$1M Prize and still powers 80% of what you watch.

Forward Engineer

Replicate a product recommender for Flipkart/Amazon dataset. Integrate LLM layer for generating "Why this recommendation" explanations using chain-of-thought prompting over collaborative filtering outputs.



Semester 2 | 12 Credits, 9 Core & 3 Elective

Deep Learning Specialization

Course	Credits	Type
Pattern Recognition and Fuzzy Logic	3	Core
Natural Language Processing for Deep Learning	3	Core
Computer Vision for Deep Learning	3	Core
Elective 1 (from pool)	3	Elective

What You Master

- **Deep Learning:** Gradient descent variants, regularization theory, optimization proofs, distributed training
- **Transformers:** Multi-head attention, pre-training (MLM, CLM), fine-tuning (LoRA, RLHF), tokenization
- **Computer Vision:** ResNet, EfficientNet, ViT, YOLO, U-Net, GANs, diffusion models, self-supervised learning
- **Architecture Design:** Depth-width tradeoffs, skip connections, attention mechanisms

Tools & Tech Stack



- **Build:** custom NER transformer, fine-tuned LLaMA, object detection system, diffusion model

* Curriculum is tentative and may be changed based on PD discretion and industry dynamics.



Projects and Case Studies

PROJECT 1

SHIELDNET

Multimodal Content Integrity Platform

Core Idea:

Multi-tower neural architectures (CNN + BERT + Wav2Vec) with cross-attention to detect coordinated inauthentic behavior—bot networks posting variations of harmful content.

GenAI Stack:

CLIP for image-text alignment | GPT-4V for nuanced context understanding | Gemini Pro Vision for video temporal reasoning | Guardrails AI for output schema validation

COMPLEXITY ★★☆☆☆

05 Sprints

PROJECT 2

CLAUSEFORGE

Contract Intelligence Engine

Core Idea:

Legal-BERT + graph neural networks modeling clause dependencies understanding a liability clause is weakened by an indemnification clause three pages later.

GenAI Stack:

Claude 200K for full-contract reasoning | Anthropic's constitutional AI principles for legal accuracy | Embedding models for clause similarity | Semantic chunking with overlap for cross-reference detection

COMPLEXITY ★★☆☆☆

04 Sprints

Case Studies

Reverse Engineer

Learn occupancy networks, BEV transformers, and temporal fusion through dissecting Tesla Autopilot's pure-vision architecture—the system processing 8 cameras at 36fps without LiDAR, as explained in Karpathy's AI Day presentations.

Forward Engineer

Build a vision-only warehouse robot navigator in CARLA/Isaac Sim. Integrate GPT-4V for reading safety signage, understanding context ("wet floor" → slow down), and generating natural language explanations of navigation decisions



Semester 3 | 18 Credits, 9 Electives & 9 Research

Advanced Specialization

Component	Credits	Type
Elective 2 (from pool)	3	Elective
Elective 3 (from pool)	3	Elective
Elective 4 (from pool)	3	Elective
Project/Dissertation	9	Research

Research Deliverables (Dissertation I)

- Literature survey (30+ papers)
- Problem formulation
- Dataset curation
- Baseline implementation
- Preliminary experiments
- Conference paper submission

Tools & Tech Stack

FastAPI mlflow Kubeflow LangSmith kubernetes

* Curriculum is tentative and may be changed based on PD discretion and industry dynamics.



Elective Pool

Course	Specialization Track
MLOps and Production AI Systems	Production AI
Generative AI: Foundations and Applications	Production AI
Agentic AI and Multi-Agent Systems	Production AI
Advanced Topics in LLMs and Context Engineering	Production AI
Big Data Engineering	Data Engineering
Data Wrangling with SQL	Data Engineering
Data Visualization and Interpretation - Power BI	Data Engineering
Data Mining	Data Engineering
Computer Vision	Specialized AI
Speech and Audio Processing	Specialized AI

Course	Specialization Track
Machine Learning for Signal Processing	Specialized AI
Digital Signal Processing	Specialized AI
Optimization Methods	Theory & Optimization
Soft Computing	Theory & Optimization
Data Structures and Algorithms	Theory & Optimization
Neural Processing	Theory & Optimization
Internet of Things	Emerging Tech
Multi-core and Cloud Computing	Emerging Tech
Artificial Intelligence for Biomedicals	Emerging Tech
Granular Computing	Emerging Tech

Note: The electives list above is indicative. IIT Jammu 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 the discretion of the faculty and Program Directors.



Projects and Case Studies

PROJECT 1

CORTEXRAG

Enterprise Knowledge Fabric

Core Idea:

Hierarchical retrieval with multi-index routing—queries classified to specialized indices (HR→HRIS, tech→code, finance→SQL). Solve "needle in haystack" at 10M+ document scale in <2 seconds

GenAI Stack:

LlamaIndex for orchestration | Qdrant + BM25 hybrid search | Cohere Rerank for result refinement | Contextual compression | Self-querying with metadata filters | Citation extraction with source attribution

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PROJECT 2

QUERYMIND

Natural Language Analytics Engine

Core Idea:

Semantic parsing with schema-aware prompting - let a CFO ask "What was CAC trend Q3 vs Q2 by channel?" and get accurate SQL + visualization without BI team dependency.

GenAI Stack:

GPT-4 with schema injection | Vanna.ai patterns for Text-to-SQL | Few-shot prompting with query templates | Semantic caching for repeated patterns | Vega-Lite generation for auto-visualization

COMPLEXITY ★★★★★

04 Sprints

Case Studies

Reverse Engineer

Learn feature stores, online/offline serving splits, and model versioning through dissecting Uber's Michelangelo—the platform managing 10,000+ production models with <50ms p99 latency for real-time pricing and ETA predictions.

Forward Engineer

Build a lightweight MLOps platform for a 10-person ML team using MLflow + Feast + FastAPI. Integrate LLM layer for auto-generating experiment summaries, model cards, and deployment runbooks from experiment metadata.



Semester 4 | 18 / 24 Credits | Full-Time Research

Dissertation

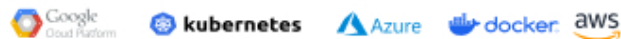
Component	Credits	Focus
Project/Dissertation II	9/15	Novel Research Contribution
Relevant Elective from SWAYAM Portal	3	Novel Research Contribution
Elective 5	3	Novel Research Contribution
Elective 6	3	Novel Research Contribution

Total - 18 Credits

Research Deliverables (Dissertation I)

- Novel algorithm/architecture contribution
- Extensive experiments with ablation studies
- State-of-the-art benchmark comparison
- Statistical validation
- Production deployment
- Comprehensive thesis (100+ pages)

Tools & Tech Stack



Project Mode: Students who will follow a project mode will bring a problem relevant to the program and their corresponding industry. They have to undergo 2 more electives in semester 4, ensuring the overall credit for the project will be 18 credits (9 credits in sem 3 + 9 credits in sem 4).

Note: Students will be allowed to follow a Thesis mode or Project mode based on the Program Director's discretion and overall CGPA.



Projects and Case Studies

PROJECT 1

NEXUSAI

Autonomous Enterprise Operations Agent

Core Idea:

Hierarchical multi-agent architecture—not one LLM but a swarm that reads emails, queries databases, drafts documents, schedules meetings, executes APIs. What Devin did for coding, but for business ops.

GenAI Stack:

LangGraph for stateful workflows | CrewAI/AutoGen for multi-agent orchestration | Mem0 for persistent memory | Tool calling with function schemas | ReAct + Chain-of-Thought reasoning | Guardrails for output validation | vLLM/Ollama for self-hosted inference

COMPLEXITY ★★★★★

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PROJECT 2

DOMAINFORGE

Specialized LLM Training Pipeline

Core Idea:

Take Llama/Mistral, specialize for medical/legal/financial via QLoRA—beat GPT-4 on domain benchmarks at 1/100th inference cost. The economics make enterprise LLM deployment viable.

GenAI Stack:

QLoRA fine-tuning with 4-bit quantization | Instruction dataset creation from domain experts | DPO alignment without reward models | Unsloth for 2x training speedup | Hugging Face PEFT | Custom tokenizer extension for domain vocabulary

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05 Sprints

*Students may work on their own company projects and will be encouraged to do so.

Case Studies

Reverse Engineer

Learn hierarchical planning, sandboxed code execution, and self-correction loops through dissecting Cognition's Devin - the AI software engineer that passed real SWE-bench tasks by autonomously navigating codebases, writing tests, and debugging across multi-file changes.

Forward Engineer

Build ResearchPilot- an autonomous agent that searches ArXiv/Semantic Scholar, reads PDFs, extracts key findings, synthesizes across papers, and generates literature reviews with proper citations. Integrate Mem0 for multi-session memory and human-in-the-loop checkpoints.



Why this M.Tech Should Be Your #1 Choice?

India's first program to blend **AI and GenAI with Data Science**, offering context-rich learning supported by real industry projects and case studies.

CURRICULUM INNOVATION

Only **M.Tech** with Agentic AI + Production MLOps courses.
Cutting edge latest tools and AI technologies

RESEARCH AND PROJECT MODES

Students will be able to follow a Research Mode or Project Mode based on their CGPA and Program Directors guidance

INDUSTRY RELEVANCE

MLOps, deployment, monitoring, cloud platforms. Build production systems, not just models.

FLEXIBILITY

21 elective courses. Customize your path: GenAI, Data Engineering, CV, NLP, IoT, Biomedical AI.

INDUSTRY RELEVANCE

Active researchers, industry collaborations, masterclasses by Industry Leaders





Program Outcomes

At the end of the Program, the learners will have expertise in the following areas:

Technical Mastery in AI and Data Science

LEARNERS WILL:

- Build strong foundations in **Mathematics, Statistics, and Programming for AI and Data Science** through the Futureense bridge modules
- Develop hands-on skills in **Python, SQL, and data visualization** for structured and unstructured data.
- Learn to design, train, and deploy AI models using modern tools such as **PyTorch, TensorFlow, LangChain, Hugging Face, AutoGen, and Spark**.
- Gain proficiency in **Generative AI, Agentic AI, and context-aware systems**, including prompt engineering, RAG (Retrieval-Augmented Generation), and agent orchestration.
- Master key AI domains - **Machine Learning, Deep Learning, NLP, Computer Vision, and Fuzzy Logic** - to design intelligent models and pipelines.

Applied Innovation and System Building

LEARNERS WILL:

- Move beyond model-building to **end-to-end AI system design**, integrating data engineering, workflow automation, and deployment (MLOps).
- Apply **AI and Data Science** principles to solve complex problems in domains like healthcare, fintech, governance, smart manufacturing, and digital services.
- Use **Big Data frameworks** (Apache Spark, Kafka, IoT) to deploy large-scale, real-time data streams.
- **Implement Generative and Agentic AI solutions** that automate reasoning, decision-making, and content generation.
- Translate research into production-grade systems through **capstone projects and dissertations** in the third and fourth semesters.

Professional & Career Readiness

GRADUATES WILL:

- Earn **Executive Alumni Status from IIT Jammu**, providing long-term career mobility and recognition.
- Be equipped for **cross-functional AI roles** - from technical engineering to solution architecture and AI product management.
- Learn to work with **distributed, cloud-based AI environments**, leveraging MLOps, data pipelines, and ethical deployment frameworks.
- Build professional confidence through **presentations, applied projects, and research-led dissertation work** aligned with real-world use cases.
- Contribute meaningfully towards building **fair, inclusive, and socially responsible AI systems** aligned with the **AI for Bharat** vision.



Program Director

Dr. Karan Nathwani, Ph.D. (IIT Kanpur) and M.Tech (ABV-IIIITM Gwalior), is a leading researcher in adaptive signal processing, speech enhancement, and machine learning. With research experience spanning IIT Kanpur, France, and the University of Oxford, his work bridges AI theory with impactful real-world applications. He is the pioneer of **India's First Sound-based Anti-drone Detection System**, adopted by the Indian Army, and has published widely in top international forums like **INTERSPEECH** and **IEEE SPCOM**. Prof. Nathwani brings a builder's vision to AI, developing systems that not only think but also perform in the real world.

Prof. Karan Nathwani

Associate Professor, Department of Electrical Engineering, IIT Jammu



IIT Jammu

Campus Immersion

The campus immersion phase is a pivotal part of the program, offering students the chance to engage in on-campus activities and sessions during the designated immersion period. This allows participants to experience traditional classroom settings and provides a platform to interact directly with IIT Jammu's renowned faculty.

A campus immersion will be conducted once every academic year. The first-year campus immersion is compulsory, while the second-year immersion is optional.

- A detailed schedule for the campus immersion will be shared ahead of the sessions.
- Boarding and lodging expenses during the immersion shall be borne by the learners.
- An additional cost of approximately ₹5,000 for each campus immersion.

LIVE FACULTY SESSIONS • HACKATHONS & PROJECTS • HANDS-ON LABS • NETWORKING & MENTORSHIP

All learners are required to **Visit the IIT Jammu Campus Once a Year**, choosing from two available immersion slots per academic year.

The First Year of Campus Immersion is Compulsory, while the second year is optional.





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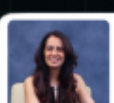


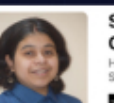





Futureense Leadership Council

Co architects, Professors of Practice and Mentors of the Program

This is India's first-ever AI-driven Academic Think Tank - something no one has ever done before. We've brought together the best minds in the industry to guide and mentor our programs, giving students a hands-on, real-world experience that sets them apart.



futureense
leadership
council

 <p>Divesh Singla Vice President, Global Operations and Head, APAC SIGNANTHEALTH</p>	 <p>Alok Tiwari Director Of Analytics JUNGLEE</p>	 <p>Anand Das Chief Digital & AI Officer TVS</p>	 <p>Kaushik Das Managing Director Catalyst</p>	 <p>Anupam Gupta Independent Consultant- AI/ML Product Development amplifyhealth</p>
 <p>Ankit Mogra Director - Insights & Analytics ATHER</p>	 <p>Nitin Srivastava Global Head of Data and Analytics Dr. Reddy's</p>	 <p>Muthumari S Global Head of Data & AI Studio brillio</p>	 <p>Shrisha Ray Director of Engineering THOMSON REUTERS</p>	 <p>Aditya Khandekar President Corridor Platforms</p>
 <p>Ishu Jain Head Of Central Analytics Myntra</p>	 <p>Pankaj Rai Group Chief Data and Analytics Officer WIPAC</p>	 <p>Nithya Subramanian Senior Director Data and AI COE BEST BUY</p>	 <p>Pankaj Srivastava Partner pwc</p>	 <p>Saurabh Agarwal Chief Executive Officer DAJOM</p>
 <p>Satyakam Mohanty Founder & Managing Partner wyser</p>	 <p>Supria Dhanda Co-Founder & Managing Partner wyser</p>	 <p>Madhu Hosadurga Global Vice President, Enterprise AI Schneider Electric</p>	 <p>Saurabh Kumar Director - Data Engineering LOWES</p>	 <p>Sharmistha Chaterjee Head of Software and Systems Engineering IBM</p>
 <p>A V Rahul Director, Analytics Barracuda</p>	 <p>Tushar Sahu Director Engineering, Google Google</p>	 <p>Swati Jain Partner - Digital, AI & Analytics, Deloitte Deloitte</p>	 <p>Madhurima Agarwal Managing Director - Microsoft for Startups Microsoft</p>	 <p>Bhargab Dutta Chief Digital Officer, Centuryply CENTURYPLY</p>



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FutureSense Leadership Council

Co architects, Professors of Practice and Mentors of the Program

 <p>A V Rahul Director, Analytics </p>	 <p>Arvind Balasundram Executive Director, Commercial Insights & Analytics </p>	 <p>Ashish Dabas Vice President </p>	 <p>Praveen Sathyadev Head Business Growth (VP) - Analytics, Insights and AI </p>	 <p>Srinu Oduru Head of IT Delivery and Operations </p>
 <p>Akshay Kumar Research & Analytics Leader </p>	 <p>Anirban Nandi Head of AI Products & Analytics (Vice President) </p>	 <p>Indrani Goswami Associate Director </p>	 <p>Vishal Nagpal Director of Data and AI </p>	 <p>Sumon Mal Director Engineering </p>
 <p>Tushar Chahal Chief Technology Officer </p>	 <p>Ruchika Singh Director, Data Science & Insights </p>	 <p>Krithika Muthukrishnan Chief Data Science Officer </p>	 <p>Monica S Pirgal Chief Executive Officer </p>	 <p>Deepa Mahesh Head - Analytics, BPS </p>
 <p>Gaurav Srivastava Analytics Business Intelligence Leader </p>	 <p>Arpit Agarwal Data Science Manager </p>	 <p>George Joseph Global head of analytics, customer experience - support operations </p>	 <p>Pramod Rawat Director </p>	 <p>Vidhi Chugh Head of AI </p>
 <p>Sulabh Jain Chief Analytics Officer </p>	 <p>Ashish Kulkarni Director Applied AI </p>	 <p>Ashutosh Shinde Senior Director of Software Engineering </p>	 <p>Biju Kallepilli Senior Director </p>	 <p>Satish Padmanabhan Change and Strategy Leader </p>
 <p>Monishankar Hazra Sr Director - Technology </p>	 <p>Radhika Menon Senior Director - Head AI Delivery </p>	 <p>Nishant Chandra Industry Copilot Leader & Head </p>	& more	



AI Clinic



Where Classroom Learning Meets Real-World Execution

The AI Clinic is a unique initiative that enables learners to immerse themselves and gain hands-on experience with AI-driven systems and tools. This approach is similar to how medical professionals develop real-world skills while working in a hospital or clinic in organizations from Day 1.

What Happens Inside the AI Clinic?

- **Live No Code Enterprise Projects:** Work on real business challenges sourced from FutureSense's industry network, across marketing automation, financial forecasting, and workflow transformation.
- **AI Workflow Design and Implementation Roadmaps:** Learn to design, automate, and optimize AI-first business systems, mirroring how global enterprises deploy Generative and Agentic AI frameworks.
- **Tool Mastery in Action:** Get hands-on experience with 30+ leading AI and automation tools, from ChatGPT, Claude, and Zapier to Looker Studio, LangChain, and GitHub Copilot.
- **Guided Mentorship:** Receive one-on-one feedback from industry mentors and program faculty who review your project's AI strategy, implementation logic, and measurable ROI.



Why Does It Matter?

While most programs end with case studies, this one ends with proof of execution. Your AI Clinic projects become part of your career portfolio, demonstrating your ability to lead and deliver AI-led business outcomes, a differentiator that sets you apart in the talent market. This is where ideas become impactful, and managers become execution leaders.

Ideas Labs

Throughout the program, test startup ideas using skills you're learning. Not mandatory. But if you're entrepreneurial, this is your launchpad.



Ideate Pitch weekly. Get feedback. Test and iterate rapidly.



Build MVPs Use AI tools to build working prototypes. Test with users.



Pitch & Fund Present to VCs + founders. Best ideas get incubation support.



Futureense Bridge Course

Before the main program begins, every learner goes through a structured Bridge Course designed to level the playing field for all backgrounds. This preparatory module ensures you start the **M.Tech** ready to learn, build, and apply, not catch up.

Where you are now

Enrolled

BRIDGE (DAY 1 READY)

Program Starts

What You'll Learn?

The Bridge Course focuses on equipping non-AI professionals with hands-on clarity in the fundamentals before the IIT curriculum begins.

- Mathematical & Statistical Foundations for AI
- Core Programming in Python & Data Structures
- SQL & Database Essentials
- Introduction to Machine Learning Concepts
- Prompt Engineering & Generative AI Fundamentals

Outcome: Enter the program with the confidence, technical fluency, and foundational skill set needed to excel from day one.





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Breakfast Club

Not Just the Program Journey - We Support You Even When You Graduate

Futureense Breakfast Club is an alumni network of all Futureense learners, who continue to learn, collaborate, and grow together even after completing the programs.

You become part of a tribe that never stops evolving!

What You Get as a Member +

01

Access the Futureense
Alumni Network

02

Join Monthly
Career Webinars

03

Get Referral &
Member Benefits

04

Earn Recognition
& Rewards

05

Learn Continuously
& Collaborate

Why It Matters? +

The Breakfast Club is designed specifically to ensure that learning and growth never stop! Even after graduation, you'll remain part of a network of AI-ready leaders influencing businesses, startups, and enterprises across industries.

A COMMUNITY THAT GROWS WITH YOU!



Career Outcomes

40-120%

Average Salary Growth

150-250%

Highest Salary Growth

Job Roles after M.Tech in GenAI & Data Science

AI ENGINEER

₹12-28 LPA

MACHINE LEARNING
ENGINEER

₹10-25 LPA

DATA SCIENTIST

₹12-26 LPA

APPLIED
SCIENTIST - AI/ML

₹22-45 LPA

GENAI SPECIALIZATION

LLM ENGINEER

₹18-40 LPA

GENERATIVE AI
SOLUTIONS ENGINEER

₹20-38 LPA

AGENTIC AI / MULTI-AGENT SYSTEMS

AGENTIC AI
DEVELOPER

₹15-35 LPA

AUTONOMOUS AI
SYSTEMS ENGINEER

₹22-45 LPA



MLOPS & PRODUCTION AI SPECIALIZATION

MLOPS ENGINEER

₹18-40 LPA

AI INFRASTRUCTURE
ENGINEER

₹20-42 LPA

DATA ENGINEERING SPECIALIZATION

DATA ENGINEER

₹10-22 LPA

CLOUD DATA ENGINEER

₹12-25 LPA

DEEP LEARNING SPECIALIZATION

COMPUTER
VISION ENGINEER

₹10-24 LPA

NLP ENGINEER / NLP
SCIENTIST

₹14-32 LPA

APPLIED AI / PRODUCT AI

AI PRODUCT
MANAGER

₹25-50 LPA

APPLIED MACHINE
LEARNING ENGINEER

₹20-40 LPA

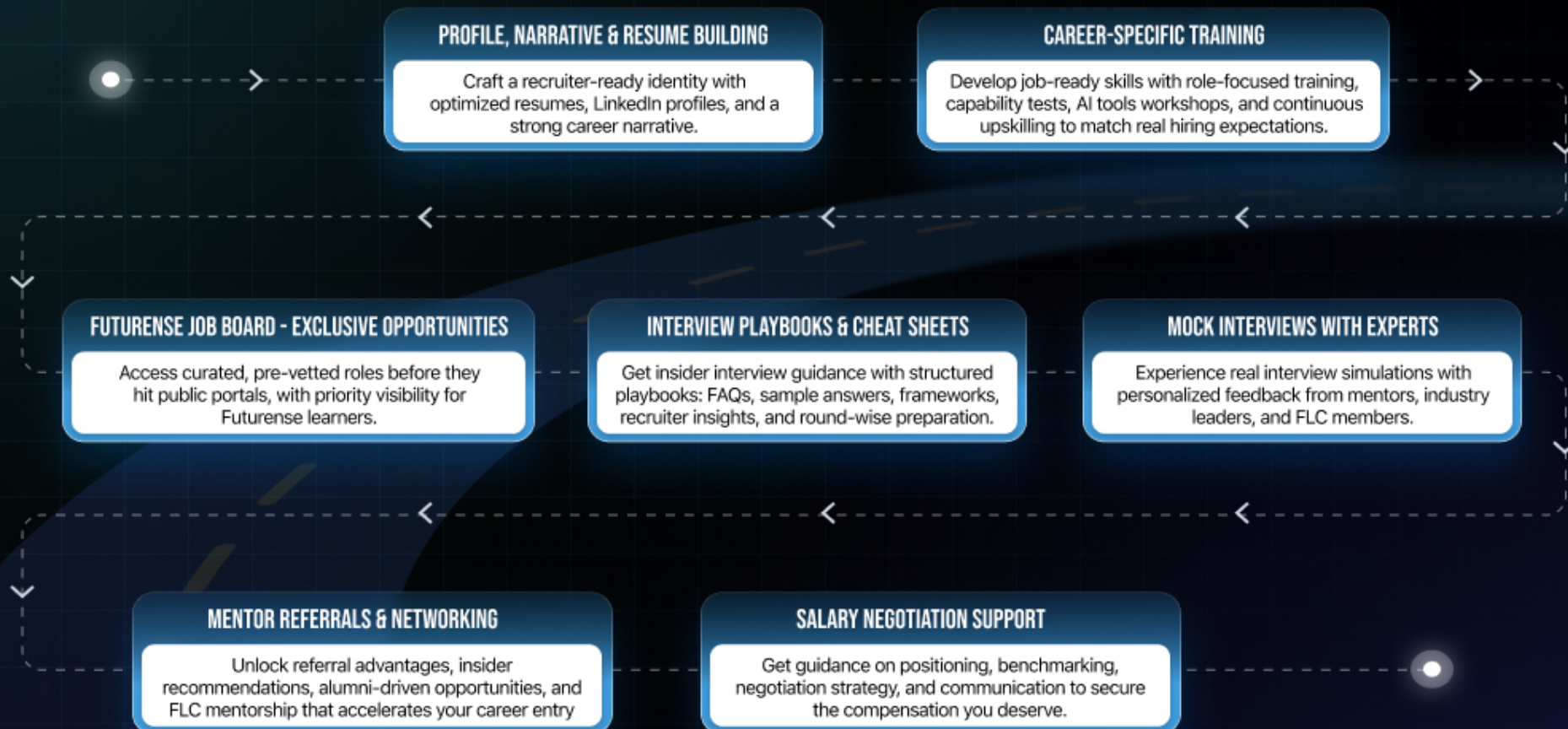
Source: Naukri, Glassdoor, Ambition box, LinkedIn

Career Support ↗

Every learner receives personalized support to transition confidently into high-impact roles across **AI, Data Science, and Intelligent Systems Engineering**. The focus is on helping you **Position, Prepare, and Perform** for the next leap in your AI-driven career.



Career Roadmap





Is This The Right Program for You?

The M.Tech in Generative AI & Data Science by IIT Jammu and FutureSense Technologies goes beyond teaching just algorithms. It trains participants to design, deploy, and manage intelligent AI systems that can reason, adapt, and scale in real business environments.

Ideal Candidates

- Working Professionals in Software Development, Data Engineering, or Analytics aiming to transition into Generative AI or system design roles.
- Early-career Engineers (1-3 years) seeking IIT-level specialization in AI-driven automation and data science.
- Mid to Senior Technologists leading digital, automation, or data teams who want to gain hands-on expertise in deploying AI systems.
- Researchers and Innovators exploring the applications of Generative AI for India's deep-tech and digital transformation sectors.

Eligibility Criteria

- B.Tech / B.E. (ECE / EE / CSE / IT / EI / ME) / M.Sc (IT / CS)
- Selection is based on the **Pre-screening Test + Personal Interview**.
- Minimum work experience of **2 Years** (work experience post minimum qualifications).
- The qualifying criterion for admission to **M.Tech (Executive)** is **CGPA of 6.0 or 60%** in the qualifying degree.
- For candidates with more than **10 Years of Experience** - Minimum **CGPA** requirement is **5.5 or 55%** in the qualifying degree.
- The applicant must qualify **Pre-Screening Test** and **Online Interview** to be eligible for this program.

← Work Experience Matrix

Experience	Minimum Graduation% / CGPA
≥ 2 years	60% or CGPA 6.0 and above
≥ 10 years	55% or a CGPA of 5.5 or above may be considered

*Online Test + Interview (Online Mode)



Fee Structure

IIT Jammu governs the total program fee for the **M.Tech in GenAI & Data Science** and is payable directly to the institute on a year-wise basis.

PROGRAM FEE

₹4,49,000/-

Year 1: **₹2,99,000**

Year 2: **₹1,50,000/-**

One-Time Registration Fee* (Non-refundable): **₹10,000/-** (Included in Program Fees)

*Paid to Futureense Technologies towards Application Processing Fees. If the application is not accepted by IIT Jammu or by Futureense, the registration fee will be refunded in full. However, if after the issuance of the offer letter, the student withdraws or drops out for any reason whatsoever, this amount is strictly non-refundable.

Additional Costs

- Examination Fee: **₹18,000/-** (payable along with Year 1 fees)
- Campus Immersions: **₹5,000/-** per immersion (approx.)
- Travel & Accommodation: Boarding and lodging expenses during the immersion shall be borne by the students as per actuals.

If Requested a Withdrawal:

- If a student submits a **withdrawal or refund request within 30 days of the batch start date**, an amount of **₹1,49,500** (equivalent to the first semester fee) will be deducted, and the remaining balance of **₹2,99,000** will be refunded.
- If a student submits a **withdrawal request after 30 days from the batch start date**, the entire amount of **₹2,99,000 + ₹18,000** (equivalent to the first-year fee) will be deducted.

Note: All refunds exclude the one-time registration fee, GST charges (18%), and any applicable subvention amount; these components are non-refundable.



About

IIT Jammu

An Institution Built for Innovation and Impact

The Indian Institute of Technology Jammu (IIT Jammu) was established in **2016** under the guidance of IIT Delhi and has since emerged as one of **India's Fastest-growing IITs, Focusing on Innovation, Research, and Industry Collaboration.**

IIT Jammu's vision is to create technologists who innovate for India and the world by combining academic excellence with societal relevance. The institute is known for its **Cutting-edge Programs, World-class Laboratories, and Interdisciplinary Approach to Modern Engineering Education.**

The institute's ethos is characterized by a culture of mutual respect, a melting pot of creativity and collaboration, and a passionate pursuit of innovative problem-solving. The educational systems at IIT Jammu are not just about learning but are a **Comprehensive Experience**, enriched through research that culminates in practicum, reflecting the institute's dedication to developing transformational leaders.

With infrastructure designed to sustain cutting-edge research in thematic areas and a goal to impact at regional, national, and global levels, IIT Jammu is not only an institution but a legacy in the making. It is poised to mentor, support, and innovate for educational institutions, industries, and traditional sectors alike, leveraging its outreach and connectivity with communities and esteemed institutions worldwide.





About Futureense

Futureense is **India's Fastest-growing AI-skilling Company**, dedicated to accelerating India's role in global AI development.

With projections from the **EY's "India@100"** report, indicating that **24.3% of the Incremental Global Workforce** over the next decade will be Indians by 2030, we are committed to positioning India at the forefront of AI evolution.

Our mission is to scientifically map AI talent demand and create scalable, industry-aligned upskilling models that equip Indian professionals with cutting-edge capabilities. By integrating real-world applications with academic excellence, we are building tomorrow's leaders across every possible funnel, shaping the talent that will define tomorrow.

Impact & Ecosystem

3M+

LEARNER
COMMUNITY

70+

UNIVERSITY
COLLABORATIONS

10+

IIT/IIM
PARTNERSHIPS

540+

TRUSTED HIRING
PARTNERS

100+

MENTORS &
EXPERTS

25K+

CAREERS
TRANSFORMED

400+

FUTURENSE TEAM
STRENGTH

65+

ENTERPRISE CLIENTS
ACROSS FORTUNE
500 AND GCCS

Our Four Verticals

Futureense.uni

Online degree and certificate programs in partnership with IITs and IIMs.

Futureense Global

First-of-its-kind study abroad and credit transfer programs with leading global universities.



Futureense SCHOOL OF AI

Co-branded AI-focused undergraduate programs for select universities, managed end-to-end.

Futureense.enterprise

Staffing and corporate reskilling solutions for Fortune 500 companies and global capability centers (GCCs).



Hiring and Staffing Partners



accenture

adani



AFFINE

AGILISIUM
Insights. Humanity. Impact.

CAPCO

ALTIMETRIK

ASHOK LEYLAND

AUTOMATION
ANYWHERE

AVONE

Backbase

bluepi

Cargill

BOSCH

bread financial.

CavinKart

CELEBAL
TECHNOLOGIES

Chryselys

citibank

DXC
TECHNOLOGY

Convergitycs
ANALYZE | SOCIALIZE | MONETIZE

Dr.Reddy's

DREAM11

DUCKER CARLISLE

escalent

(expleo)

EY

fresh
gravity

GAIN
THEORY

Gallagher

gentrack

giant eagle

digit

GrantThornton

HAVELLS



HMEL

HPE

IBM

indegene

IOPEX

Hiring and Staffing Partners





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