IIIT Dharwad

ज्ञानेन विकासः

M.Tech in Computer Science & Engineering

(Specialization: Artificial Intelligence & Machine Learning)

A transformative journey to engineer the next wave of intelligent systems.

2 years | Live Interactive Online Sessions

About IIIT Dharwad

The Indian Institute of Information Technology Dharwad (IIIT Dharwad), recognized as an Institute of National Importance, is at the forefront of India's technology education and research landscape. Located in the educational and innovation hub of Hubballi-Dharwad, the institute is redefining how technology drives learning, research, and societal impact. With a commitment to academic excellence, research-driven education, and strong industry collaboration, IIIT Dharwad nurtures a new generation of engineers and researchers equipped to lead the digital revolution. Its modern infrastructure, dynamic learning environment, and vibrant campus culture foster creativity, curiosity, and collaboration among students, empowering them to innovate and excel in a rapidly evolving technological world.

Guided by its vision to be a globally renowned academy of information technology for societal development, IIIT Dharwad integrates ethical values, interdisciplinary learning, and global perspectives across all programs. The institute's mission is to produce globally competent technology professionals who combine deep technical expertise with ethical, societal, and environmental awareness, while addressing local and global challenges through innovative, interdisciplinary solutions.

IIIT Dharwad is recognized for its strong research ecosystem, with ongoing projects in Artificial Intelligence, Cybersecurity, and the Internet of Things (IoT). The institute boasts dedicated research centers, cutting-edge laboratories, and collaborations with leading global technology firms, providing students with opportunities to engage in applied research and innovation. An upcoming Tech Park and Startup Incubation Centre will further strengthen entrepreneurship and real-world problem-solving opportunities for students and researchers.

Beyond academics, IIIT Dharwad offers a vibrant and holistic campus life. Students actively participate in clubs, societies, and annual technical and cultural fests, which foster leadership, teamwork, and creativity. Modern facilities, including hostels, digital libraries, laboratories, and sports complexes, support personal growth and enrich the overall learning experience. Through this integrated ecosystem of excellence, research, and innovation, IIIT Dharwad empowers students to transform ideas into impact and prepares them to become leaders shaping the future of technology.

About The Program

The M.Tech in Computer Science & Engineering (Specialization in Artificial Intelligence and Machine Learning) is a two-year online postgraduate program with campus immersion components designed for students and professionals aspiring to build advanced expertise in AI-driven systems, intelligent algorithms, and data-driven solutions. This program blends research-oriented learning, hands-on projects, and industry exposure to prepare learners for impactful roles in research, product development, and technology leadership. Graduates will emerge with the capability to engineer intelligent systems that can learn, adapt, and evolve across industries.

Who is this program is ideal for

- Working professionals and graduates aiming to deepen their expertise in AI and ML.
- Software developers, data scientists, analysts, and engineers seeking research-oriented upskilling.
- Individuals aspiring to pursue R&D careers or doctoral programs in AI/ML and related domains.
- Professionals looking to transition into roles in AI, automation, data science, and machine learning.

Key Program Details

Duration
2 Years

Mode
Online

Course Fees
₹ 3,54,000
Easy EMI Options are Available

Campus Immersion
A seven-day in-person session at IIIT Dharwad

Eligibility

1. Educational Qualification : B.E. / B.Tech / M.Sc / MCA degree.

2. Employment Status : Candidate should be a working professional, currently or previously employed.

3. Academic Performance:
General / OBC category - Minimum CGPA/CPI: 6.5 on a 10-point scale, or Minimum aggregate percentage: 60%.

SC / ST / PwD category - Minimum CGPA/CPI: 6.0 on a 10-point scale, or Minimum aggregate percentage: 55%.

Why Choose IIIT Dharwad?

Prestigious M.Tech Degree
Earn an M.Tech degree in Computer Science & Engineering (Specialization in Artificial Intelligence and Machine Learning) from an Institute of National Importance.

Cutting-Edge Curriculum
Learn advanced AI concepts like Deep Learning, Reinforcement Learning, Explainable AI, and Computer Vision, along with foundational engineering principles.

Campus Immersion
The program includes a 7-day on-campus immersion at IIIT Dharwad, offering hands-on learning, networking opportunities, and direct interaction with faculty and industry experts.

Distinguished Faculty
Sessions are led by IIIT Dharwad faculty and industry leaders, combining academic rigor with real-world expertise.

Capstone Project
Conclude the program with a practical, research-driven project, applying AI & ML concepts to solve real-world challenges and showcase technical and strategic expertise.

Networking Opportunities
Connect and collaborate with a diverse cohort of professionals, researchers, and industry leaders, fostering peer learning and building lasting professional networks.

Robust Industry Ties
Strong collaborations with top tech companies providing hands-on exposure and future-ready skills.

Flexible Online Learning
Learn at your own pace with live interactive sessions and campus immersions, designed for working professionals.

IIIT Dharwad Alumni Status
Earn prestigious recognition and become part of IIIT Dharwad's exclusive network of AI & ML experts and industry leaders.

Programme Module

Sl. No	Course Type	Course Name	Credit
		SEM 1	
1	DisCore	**Applied Mathematics for Computer Science**	3
		Unit 1: Linear Algebra Unit 2: Optimization Unit 3: Probability and Stochastic Process	
2	DisCore	**Advanced Data Structures and Algorithms**	3
		Unit 1: Growth Functions Unit 2: Trees Unit 3: Graph Algorithms Unit 4: Algorithm Design Strategies Unit 5: Complexity Classes	
3	DisCore	**Programming Paradigms Lab**	2
		Unit 1: Procedural Programming Unit 2: Object-Oriented Programming (OOP) Unit 3: Functional Programming Unit 4: Concurrent & Parallel Execution Unit 5: Declarative and Logic Programming Unit 6: Scripting & Automation	
4	Elective	**Introduction to AI/ML**	1
		Unit 1: Introduction to AI Unit 2: Problem Solving using Search Unit 3: Knowledge Representation Unit 4: Introduction to Machine Learning Unit 5: Supervised Learning Unit 6: Unsupervised Learning Unit 7: Applications of AI & ML	

5	Elective	**Introduction to Cybersecurity**	1
		Unit 1: Introduction to Cybersecurity Unit 2: Identity & Access Management Unit 3: Standards & Regulations	
6	Elective	**Introduction to Cloud Computing**	1
		Unit 1: Introduction to Cloud Computing Unit 2: Cloud Service Models and Deployment Models	
7	Master's Core	**Introduction to Research**	2
		Unit 1: Introduction Unit 2: Literature Review Unit 3: Research Exploration Unit 4: Patenting and Publications Unit 5: Presentation, Report and Thesis Writing Unit 6: Conclusions and Future Scope Unit 7: Principles & Ethics in Research	
8	Project	**Project-I**	3
		Total	15
SEM 2			
9	DisCore	Advanced Computing Lab	2
10	Master's Core	Literature Review and Seminar	2
11	Elective	Electives (1/2/3/4 credits)	5
12	Project	Project-II	6
		Total	15
SEM 3			
13	Project	Project-III	9
14	Elective	Electives (1/2/3/4 credits)	6
		Total	15
SEM 4			
15	Project	Project-IV	12
16	Elective	Electives (1/2/3 credits)	3
		Total	15
		Total Program Credits	60

AI & ML Specialization

Sl. No	Course Name
1	Generative AI
2	Natural Language Processing
3	Deep Learning
4	Computer Vision
5	Graph Neural Networks
6	Agentic AI
7	Reinforcement Learning
8	Explainable AI (XAI)
9	Robotics and AI
10	AI for Financial Analytics
11	Deep Speech Processing
12	AI for Healthcare Data Analytics

Alumni Privileges

Students will receive an official Institute Email ID and ID card, and will be eligible to participate in institute events and activities. Upon completion, they become part of the institute's alumni network.

Assessment & Evaluation

Students will be evaluated through a combination of **quizzes, assignments, case studies, and end-term examinations.** These diverse assessment methods ensure continuous learning and a well-rounded understanding of the subject.

Tools you'll Master

TensorFlow · Keras · PyTorch · WIRESHARK

Azure · git · GitLab · Jenkins · kubernetes

aws · scikit learn · jupyterlab

*Tool exposure varies by specialization; students may not work with all tools listed.

Programme Structure

7 Days
On-Campus Immersion

5 Program Modules
(including a seven day on-campus immersions)

Each module incorporates real-world projects, allowing participants to apply concepts in AI, ML, and advanced computing domains

Pedagogy & Delivery

The program follows a blended learning approach, combining multiple instructional methods to enhance learning outcomes:

Interactive Live Sessions

Engage with faculty and peers through discussions, Q&A, and case study analysis.

Self-Paced Learning

Access recorded lectures, readings, and practice exercises to reinforce concepts.

Experiential Learning

Apply knowledge through projects, simulations, and hands-on assignments.

Collaborative Activities

Participate in group exercises, peer learning, and forums to foster teamwork and practical understanding.

Attendance Policy

Participants are required to maintain a minimum of 75% attendance to successfully complete the program, structured as follows:

60% Synchronous Attendance: Participation in live lectures, discussions, and interactive sessions.

15% Asynchronous Engagement: Completion of recorded content and self-paced learning activities.

Program Objectives

Develop Advanced AI & ML Expertise: Equip participants with in-depth knowledge of Artificial Intelligence, Machine Learning, Deep Learning, and related technologies to tackle complex real-world problems.

Research-Oriented Problem Solving: Foster the ability to design, execute, and evaluate research projects, enabling contributions to academic and industrial innovation.

Data-Driven Decision Making: Strengthen skills in data analytics, predictive modeling, and AI-driven decision frameworks for effective problem-solving.

Hands-On Technical Proficiency: Build practical expertise through projects, simulations, and lab-based exercises, applying AI & ML techniques to diverse domains such as computer vision, robotics, and autonomous systems.

Innovation and Ethical Leadership: Promote responsible AI practices, ethical use of technology, and innovative thinking for societal and organizational impact.

Collaborative and Interdisciplinary Skills: Prepare participants to work in multi-disciplinary teams, integrating AI & ML solutions across varied domains.

Future-Ready Careers: Enable graduates to excel in R&D roles, AI/ML development, data science, and advanced research programs, positioning them as leaders in technology-driven industries.

Learning Outcomes

- **Design and Implement AI & ML Solutions:** Apply machine learning algorithms, deep learning architectures, and AI models to solve practical challenges.
- **Conduct Research and Innovation Projects:** Execute research surveys, experimental projects, and capstone projects that demonstrate analytical rigor and technical creativity.
- **Integrate AI in Real-World Applications:** Leverage AI & ML for computer vision, robotics, autonomous navigation, and other applied domains.
- **Analyze and Interpret Complex Data:** Use mathematical, statistical, and computational tools to derive insights and make data-driven decisions.
- **Adopt Ethical and Explainable AI Practices:** Implement responsible AI, XAI frameworks, and security-conscious solutions in research and development.
- **Collaborate Across Domains:** Work effectively in interdisciplinary teams, applying AI & ML knowledge to engineering, business, and societal challenges.
- **Demonstrate Technical and Strategic Impact:** Showcase capstone and semester projects to translate learning into actionable, measurable outcomes.

Fee Structure

Application Fee: ₹ 2,000
Program Fee (Inclusive of Application Fee) : ₹ 3,56,000

Semester	I	II	III	IV	Total
Fee	88500	88500	88500	88500	**354000**

*Easy EMI Options are Available

*The application fees is strictly non-refundable and non-transferable.

Refund Policy

A refund is applicable after a deduction of 10000 before commencement of the batch, provided the course material has not been accessed or downloaded.

No refund will be provided on or after the batch commencement date

Program Certificate

Admission Process

1. Fill the application form
And pay the application fee

2. Appear for an interview round

3. If selected,
you will receive the offer letter

4. Pay the Programme fees and
confirm your admission

Program Director

Dr. Sunil Kumar P V
Assistant Professor

Indian Institute of Information Technology, Dharwad

Dr. Sunil Kumar P V is an accomplished academician and researcher in the field of Computer Science and Engineering, with a specialization in Machine Learning for Bioinformatics. He completed his PhD from NIT Calicut and has over 15 years of experience in teaching, research, and industry collaboration. Currently serving as an Assistant Professor at Indian Institute of Information Technology, Dharwad, Dr. Sunil has previously held faculty positions at CMR Institute of Technology, MES College of Engineering, and MEA Engineering College. He has published extensively in peer-reviewed journals and international conferences and has delivered numerous invited lectures and workshops on advanced computing, AI, and bioinformatics. With strong expertise in AI, ML, data analytics, and computational biology, he brings a rich blend of research excellence, teaching acumen, and industry engagement to lead and inspire the next generation of technology professionals.

Program Faculty

Dr. Abdul Wahid
Assistant Professor

Computer Science & Engineering
Ph.D. (IIT Dhanbad)

Dr. Animesh Roy
Assistant Professor

Computer Science & Engineering
Ph.D. (IIEST)

Dr. Dibyajyoti Guha
Assistant Professor

Computer Science & Engineering
Ph.D. (IIT Bhubaneswar)

Dr. Girish G N
Assistant Professor

Computer Science & Engineering
Ph.D. (NITK)

Dr. Krishnendu Ghosh
Assistant Professor

Computer Science & Engineering
Ph.D. (IIT Kharagpur)

Dr. Malay Kumar
Assistant Professor

Computer Science & Engineering
Ph.D. (NIT Raipur)

Dr. Milind Chabbi
Professor of Practice

Computer Science & Engineering
Rice Univeristy

Dr. Pavan Kumar C
Assistant Professor

Computer Science & Engineering
Ph.D. (VIT Vellore)

Dr. Prabhu Prasad B M
Assistant Professor

Computer Science & Engineering
Ph.D. (NITK Surathkal)

Dr. Pramod Yelmewad
Assistant Professor

Computer Science & Engineering
Ph.D. (NITK Surathkal)

Dr. Shrinivas Kulkarni
Professor of Practice

Computer Science & Engineering
PhD - University of Edinburgh

Dr. Sunil C K
Assistant Professor

Computer Science & Engineering
Ph.D. (NITK Surathkal)

Dr. Sunil Kumar P V
Assistant Professor

Computer Science & Engineering
Ph.D. (NIT, Calicut)

Dr. Suvadip Hazra
Assistant Professor

Computer Science & Engineering
Ph.D. (NIT Durgapur)

Dr. Vivekraj V K
Assistant Professor

Computer Science & Engineering
Ph.D. (IIT Roorkee)

Prof. Rajesh Vasa
Adjunct Professor

Computer Science & Engineering
PhD - Swinburne Univ. of Technology

Contact Us:

08047493960

admissions.cse@iiitdwd.ac.in

https://cep.digivarsity.com/iiit-dharwad