

B.Sc. Computer Science with Artificial Intelligence**

ABOUT THE PROGRAMME

The B.Sc. Degree in Computer Science with Artificial Intelligence – a 3 – year Degree Programme is designed to equip students with a strong foundation in computing principles while integrating the latest advancements in Artificial Intelligence (AI) and Machine Learning (ML). With a curriculum that blends core computer science concepts, mathematical foundations, and AI technologies, students will gain hands-on experience in areas such as machine learning, deep learning, natural language processing, data science, and automation.

The program emphasizes innovation, critical thinking, and ethical AI development, ensuring that graduates are well-prepared to tackle realworld challenges in an AI-powered world. By fostering a strong researchoriented and industry-relevant approach, this course enables students to become proficient AI professionals, software developers, data scientists, and researchers, ready to contribute to the ever-evolving technological landscape.



USP

Blend Core Computing Skills with Advanced AI Technologies, to shape the next generation Tech innovators for High-Demand Roles in the AI-Driven World.

ELIGIBILITY

- Students completed class XII or equivalent from a recognised board, with Mathematics as a compulsory subject are eligible to apply.
- Students who have studied Computer Science are preferable.

** Subject to approval by affiliating Institution - University of Madras . Year of commencement - Academic Year 2025 -26



M.O.P. Vaishnav College for Women (Autonomous)

(College affiliated to University of Madras and Re-accredited at 'A++' Grade by NAAC) Chennai - 600 034

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COURSE CURRICULUM

• Python Programming

- Java Programming
- Data Structures
- Introduction to Artificial Intelligence
- Prolog Practical
- Computer Vision
- Computer Vision Practical
- Natural Language Processing
- Software Engineering
- Expert System
- Machine Learning
- Fuzzy Logic
- Artificial Neural Networks
- Robotics and Its Applications

SKILL ENHANCEMENT COURSES

- Office Automation Practical
- Quantitative Aptitude
- Language Proficiency for Employability
- Web Page Design Practical
- Desktop publishing Practical
- Emotional Intelligence
- Technical Writing

LEARNING PATHWAYS

- Internships
- Online MOOCs
- Experiential & Project-Based Learning
- Paper Publications
- Diploma Courses
- Value added Courses
- Workshops
- Guest Lectures
- Industry Collaborated activities

BEYOND THE CLASSROOM ACTIVITIES

- Program Clubs Co-Curricular Activities
- Journal Article Authoring
- Computer Fair Project Expo
- Hackathon
- International & National Conferences
- Community Programs
- Inter-Collegiate Events



B.Sc. Computer Science with Artificial Intelligence CAREER ROADMAP

EMPLOYMENT PROSPECTS

AI Research & Development

- AI Research Assistant
- Data Scientist

Machine Learning & Data Science

- Data Analyst
- ML Engineer
- AI Developer

AI in Software Development

- AI Software Developer
- ML Engineer

AI in Robotics & Autonomous Systems

- Robotics Engineer
- Computer Vision Engineer
- AI for IoT

AI in Business & Consulting

- AI Consultant
- Business Analyst

AI in Cybersecurity

- AI Security Analyst,
- Ethical Hacker
- AI Cybersecurity Specialist
- Threat Intelligence Engineer

AI in Healthcare & Biotech

- AI Medical Analyst,
- Bioinformatics Engineer
- AI in Drug Discovery
- Healthcare AI Scientist

ENTREPRENEURIAL OPPORTUNITIES

- AI-Powered SaaS AI chatbots, CRM automation, HR tools.
- Healthcare AI AI diagnostics, drug discovery, mental health bots.
- E-commerce AI Smart recommendations, inventory forecasting, AI chatbots.
- Cybersecurity AI Fraud detection, threat analysis, identity verification.
- FinTech AI AI trading bots, risk assessment, robo-advisors.
- AI Content & Marketing AI-generated blogs, video editing, ad targeting.
- Education AI AI tutors, personalized learning, automated grading.
- Smart Home & IoT AI Home automation, security, AI assistants.
- LegalTech AI AI contract analysis, legal research, compliance tools.
- Gaming & VR AI AI-powered NPCs, game testing, adaptive storytelling.

HIGHER STUDY OPPORTUNITIES

- Master's Degree (M.Sc. or M.Tech)
 - M.Sc. in Artificial Intelligence
 - M.Tech in Computer Science (with AI specialization)
 - M.Sc. in Data Science or Machine Learning
- Master's in Data Science
- Master's in Robotics
- PhD in Artificial Intelligence/Computer Science
- MBA with a focus on Technology or AI
- Master's in Human-Computer Interaction (HCI)
- Master's in Computational Neuroscience



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INSIGHTS FROM PROMINENT LEADERS AI IN 2025: TRANSFORMATIVE POTENTIAL AND GLOBAL IMPACT

"AI can transform millions of lives by enhancing health, education, and agriculture, accelerating progress toward Sustainable Development Goals." – PM Narendra Modi, Paris



"We are still in the early days, and I already believe AI will be the most profound shift of our lifetimes," -Mr Sundar Pichai,Google CEO during Paris Summit.

"Generative AI is revolutionizing the world, making prompt engineering a highly valuable skill. With companies deploying more AI agents, mastering AI communication is crucial for job seekers!" – Dr. Arvin Subramanian, AI Engineer (DevSecOps), Deriv, Dubai

" I strongly believe AI will change the way people communicate their "ideas, thoughts, and emotions. Having a deep understanding will always keep us ahead of the curve and make us part of the next Internet revolution "- Mr. Deepak Subramanian , Founder at EmoNet AI, Urbana, United States

"AI is booming, with high demand for skilled professionals. Studying AI unlocks career opportunities across industries, with roles like Data Scientist and AI Engineer in high demand." - Mr. Narayanan S, Vice President – Digital Engineering & Head, Legacy Modernization, Virtusa Consulting Services Ltd

Q INFRASTRUCTURE:

ATRIUM THE HEART OF OUR CAMPUS





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LIBRARY FOR CURIOUS MINDS

CAFETERIA A RESERVOIR OF KNOWLEDGE A LIVELY SPACE TO RECHARGE **AND CONNECT**

SMART CLASSROOMS **INTERACTIVE SPACES FOR ACADEMIC EXCELLENCE**





COMPUTER LABS CUTTING-EDGE TECHNOLOGY FOR HANDS-ON LEARNING





MEGHDOOT & AUDITORIUM

A GRAND STAGE FOR EVENTS AND

INSPIRATIONS

SEMINAR HALLS A DYNAMIC VENUES FOR INSIGHTFUL DISCUSSIONS









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CONTACT

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