



M.O.P. VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)

(College affiliated to University of Madras and Re-accredited at “A++” grade by NAAC)
Chennai-600034



B.Sc. DATA SCIENCE
(3 Year Undergraduate Programme)

GENESIS OF THE PROGRAMME

B.Sc. Data Science, an Undergraduate Programme with three years of study including six semesters was inceptioned in 2021 to pioneer Analytics education. The programme blends AI, ML, and Deep Learning equipping students with technical expertise, analytical skills, and hands on experience.

With a focus on critical thinking and innovation, the programme empowers students to apply advanced data handling techniques, develop predictive models, and communicate insights effectively. Through technology enhanced learning and industry collaborations, students are prepared to excel in Research, Industry, and Entrepreneurship.

USPs OF THE PROGRAMME

- B.Sc. Data Science at M.O.P.Vaishnav college, ensures industry-relevant training in the latest data science tools and technologies.
- The programme provides interdisciplinary approach combining elements of mathematics, computing, and real-world applications.
- The Programme aims to provide training on the use of data and responsible data science practices.

ELIGIBILITY

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

WHY DATA SCIENCE ?

AN ELITE CAREER WITH ENDLESS OPPORTUNITIES!

The growing need for data scientists across businesses assures high-paying jobs and endless career opportunities in the digital age.

THE POWERHOUSE OF DIGITAL ERA!

In a data-driven world, data science drives innovation and transforms industries through AI-powered insights and automation.

PROGRAMME HIGHLIGHTS



Industry-Aligned Curriculum crafted with insights from top academicians and industry leaders for cutting-edge learning.



Expert-Led Learning with faculty and industry experts using real-world case studies.



Internships & Exposure through hands-on learning, industry visits, and mentorship programs.



Career-Ready Skills with tools like Tableau, R, Python, and MATLAB for real-world challenges.



Capstone Projects & Placements with industry-relevant projects and exclusive hiring opportunities.

CURRICULUM

The Course Curriculum includes the following Core and Allied papers in addition to foundational courses English and Language

(*Course Curriculum is subject to University Regulations)

Courses focussing on Employability

- Deep Learning
- Machine Learning
- Natural Language Processing
- Artificial Intelligence Using Expert Systems
- Database Management System Using Mysql
- Data Mining and Multidimensional Modeling

Courses focussing on Entrepreneurship

- Financial Analytics
- Marketing Analytics
- Analytics for Service Industry
- Iot and Cloud Technologies

TEACHING METHODOLOGIES

In order to provide an effective learning experience, faculty adopt various teaching methodologies.

- Interactive Learning Hub
- Collaborative Learning
- Role Play
- Hands on Lab session
- Game based Mastery
- Experiential Learning
- Design Based Learning
- Peer Teaching
- Research Based Learning
- Live Industry Insights

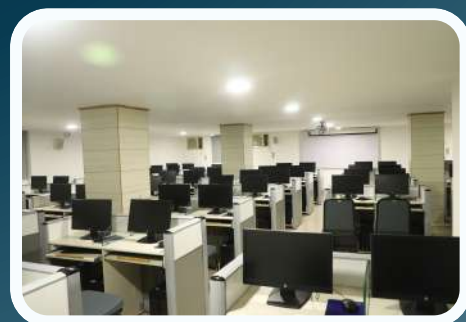
Courses focussing on Skill Development

- Object Oriented Programming with Java
- Time Series Analysis and Forecasting
- Optimization Techniques
- Data Structures and Analysis of Algorithms
- Big Data Analytics
- Probability and Statistics
- Data Communication and Network Security
- Operating Systems and Shell Programming
- Basics of Data Science
- Mathematics for Data Science

INFRASTRUCTURE & LABORATORIES

Four well-equipped computer labs with latest software, along with modern wi-fi enabled classrooms with super smart interactive boards. Softwares include,

- Python
- Tensor Flow
- R Studio
- Rapid Miner
- Cassandra
- Tableau
- MySQL
- Scilab
- MongoDB
- Hadoop



STUDENT ENRICHMENT ACTIVITIES

WORLD DIGITAL DETOX DAY

World Digital Detox Day was commemorated with a mindful, creative, and community-driven event, unplugging from digital devices. It featured a guest lecture, poetry, doodling, fabric painting, yoga, and cultural performances.



INTRA & INTER-COLLEGIATE TECH EVENTS



OLAP – An Annual Inter-Collegiate of the event where computer science students showcase their IT and analytics skills through competitions.

LINK – An Inter-Departmental Annual Fest celebrating technology, creativity, and innovation through diverse competitions.

GUEST LECTURES

Regular Guest Lectures enable learners to expand their knowledge, real-world understanding, and industrial practice. Delivered by industry experts and renowned academicians, some of the Guest Lectures include:

- Time Series Econometrics
- AI-Powered Image Processing
- AutoML Frameworks



WORKSHOPS



Dynamic workshops enhance skills through hands-on experience with emerging technologies. They bridge the gap between theory and practice, fostering innovation and problem-solving under industry expert guidance.

- Game Development
- Android App Development
- Deep Learning with Spark

JOURNAL - DATA INSIGHTS

The Department nurtures article-writing skills through its thematic journal, Data Insights, inspiring students to explore research and publish in international journals, fostering creativity and academic excellence.





THE SANKHYA CLUB

Sankhya Club is the student-driven club of the B.Sc. Data Science programme, where students come together to organize events, workshops, and activities that enhance technical skills and industry exposure. Activities of the club include:



STARTUP SAGA

STARTUP SAGA, the flagship event, showcases industry leaders sharing insights on IT entrepreneurship, inspiring innovation, networking, and learning.

SOCIAL INITIATIVES

As a part of the community service initiative of the College, the B.Sc. Data Science programme involved students in imparting digital skills and computer skills to school students, equipping them with essential technological competencies for the modern world. This initiative fosters social responsibility, inclusivity, and empowerment by bridging the digital divide and enhancing learning opportunities for all.



CAREER PATH

JOB OPPORTUNITIES



HIGHER STUDIES OPPORTUNITIES

- M.Sc. Data Science
- M.Sc. Artificial Intelligence
- M.Sc. Bioinformatics
- M.Sc. Machine Learning
- M.Sc. Business Analytics
- M.Sc. Computer Science
- M.Sc. Information Technology
- M.C.A.
- M.B.A.

PROMINENT RECRUITERS



SHINING STARS OF B.Sc. DATA SCIENCE



Ms. Yasha Gadhiya

Secured First Place in the Intern Ideation Challenge at Goldman Sachs 2024-2025, competing against 24 teams from Hyderabad and Bangalore.

Ms. Vijaishri Bhaskar

Honored as the Best Green Cycler award and also received a sapling, and various prizes during the Ozone day event organized by M.O.P.NSS (2024-2025).



Ms. Monica C, Ms. Sridevi V, Ms. Faahima F

Won First place in 'AI based activities-Mini research project' competition 2024-2025, organised by Council of Scientific & Industrial Research Central Electrochemical Research Institute(CSIR-CECRI) JIGYASA, Karaikudi and won a cash prize of Rs.9000.

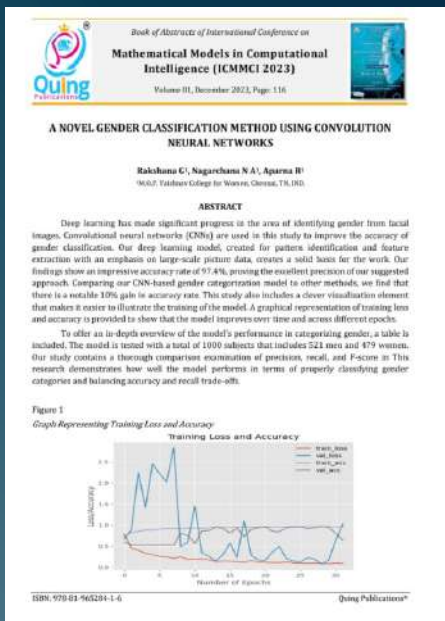


Ms. Sridevi V

Won the Best Paper Award in the International Conference ICFTAI '24, held at Hindustan College of Arts & Science, for the paper entitled "Comparative Study on Various Pattern Recognition Algorithms in Healthcare".



RESEARCH ARTICLES PUBLISHED



PATENT PUBLISHED

Application Details	
APPLICATION NUMBER	202441076837
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	10/10/2024
APPLICANT NAME	1. DR.M.S. PADMAVATHI 2. Yasha Gadhiya 3. Malavikaa K
TITLE OF INVENTION	NAVIGEYE: NEXT- GEN TRAFFIC DETECTION DEVICE FOR THE VISUALLY IMPAIRED
FIELD OF INVENTION	ELECTRONICS
E-MAIL (As Per Record)	
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	

NAVIGEYE: Next - Gen Traffic Detection Device for the Visually Impaired

HEAR FROM OUR ALUMNI



Ms. Keerthi S

Business Data Analyst,
Monolith Technologies Pvt.Ltd,
Chennai.

“Graduating from the Data Science programme has been a transformative journey. The Department provided me with countless opportunities to grow—both academically and professionally. Through hands on projects, collaborative research and industry exposure, the Department ensured to provide opportunities that deepened both analytical and technical skills which also taught to be a team player. I’m truly grateful for the support received from the Department and everything I’ve learned here”.

“The Department and M.O.P. Vaishnav College provided me with the platform to secure an Internship and Data Analyst Job at Goldman Sachs , directly through their placement program. The college also fostered my leadership skills and offered invaluable exposure to a diverse community”.



Ms. Janani PVK

Data Analyst, Goldman Sachs,
Bangalore.



Ms. Ramya Sri J C

M.Sc. Health Data Science,
University of Galway, Ireland.

“My time at M.O.P. Vaishnav College for Women while pursuing B.Sc. Data Science laid a strong foundation for my academic and professional journey. The Department’s emphasis on practical applications and interdisciplinary learning played a key role in my decision of pursuing post graduation in Health Data Science at the University of Galway”.

“Reflecting on my journey at M.O.P. Vaishnav College for Women, I am deeply grateful for the unwavering support of B.Sc. Data Science Department. Whether it was taking my first step in entrepreneurship, publishing my first research paper, or honing leadership skills, the Department nurtured a culture of curiosity, innovation, and growth, instilling confidence to push boundaries and explore new opportunities”.



Ms. Kashish A Singhi

Co- founder Canvas & Klicks,
Digital Marketing Agency
Chennai.

FACULTY PROFILE



Dr. Brinda Ramanujam
Head & Associate Professor

M.C.A., M.Phil., Ph.D.

Specializations:

Software Project Management, Software Engineering,
Cloud Computing, Adaptive Databases.

Experience: 23 years

Ms. Aparna R
Assistant Professor

M.Sc.(IT), M.C.A., M.Phil.,

UGC-NET, TN-SET

Specializations:

NLP, Blockchain Technology, Signal Processing.

Experience: 12 years



Ms. Annu
Assistant Professor

M.Sc., M.C.A.

Specialization:

Artificial Intelligence, Programming Languages,
Machine Learning, Networking.

Experience: 11 years

Ms. Priyanka P
Assistant Professor

M.C.A., UGC-NET

Specializations:

Artificial Intelligence, Business Intelligence, Cloud Computing.

Experience: 3 years



Dr. Muthakshi S
Assistant Professor

M.Sc., M.Phil., Ph.D.

TN-SET, UGC-NET SRF

Specializations:

Cloud Security, Deep Learning, Machine Learning,
Large Language Models.

Experience: 5 years

CONTACT DETAILS

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

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