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

B.Sc.MATHEMATICS

(3 YEAR UG PROGRAMME)

Empowering Women, Enabling Infinite Possibilities Through Mathematics Education Since 1992

Mathematics - The Root & Route to Success

ELIGIBILITY

Pass in Class X and XII or equivalent from any recognized board with Mathematics / Business Mathematics / Applied Mathematics can apply for the programme.

PROGRAMME OVERVIEW

Established in 1992 alongside M.O.P. Vaishnav College for Women, the B.Sc. Mathematics programme has built a legacy of excellence, fostering analytical, logical, and problem-solving skills. With a strong foundation in pure and applied mathematics, rigorous coursework, research opportunities, and computational tools, the programme equips students with both theoretical knowledge and practical skills. Guided by expert faculty, students apply mathematical concepts to fields such as computer science, finance, and actuarial science. This versatility enables graduates to make significant contributions to both academia and industry, highlighting the programme's depth and relevance.

VISION

To inspire excellence in mathematics education by fostering analytical thinking, innovation, and empowerment among women.

MISSION

To impart strong conceptual understanding and practical competence in mathematics, develop research and communication skills, promote critical thinking through effective and learner-centred teaching practices.

USP

Our curriculum provides a strong foundation in mathematics and integrates domain-specific knowledge with computational techniques, essential for pursuing higher studies and research.

PROGRAMME INFRASTRUCTURE

E-CONTENT LAB

Naalandha (E-Content Creation Lab) for developing digital learning materials.

DIGITAL LABS

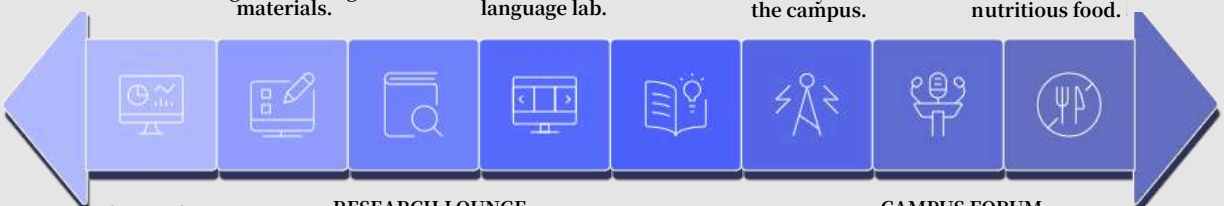
Well equipped computer labs with latest software and language lab.

M.O.P. CHANNEL

M.O.P. CRS @ 107.8 MHz FM serving the community around the campus.

FOOD COURT SWAADISHT

Welcoming ambience with nutritious food.



SUPER SMART CLASSROOMS

ICT-enabled Classrooms with projectors and touch panels.

RESEARCH LOUNGE ANVESHANA

Dedicated space for research scholars, equipped with subscribed journals.

LIBRARY

Fully automated library and Digital resource centre.

CAMPUS FORUM

ICT-enabled Seminar Halls, Open-Air theatre and air-conditioned auditorium.

PROGRAMME MODULES

A future-ready curriculum, regularly enriched to meet global standards and emerging demands.

SKILL DEVELOPMENT

Build strong conceptual clarity, analytical thinking, and advanced mathematical problem-solving skills enabling students to pursue higher studies, research, and mathematically intensive careers

- Algebra and Trigonometry
- Differential Calculus
- Integral Calculus
- Differential Equations with Python (Theory & Practical)
- Modern Algebra
- Real Analysis
- Fourier Series and Integral Transforms
- Discrete Mathematical Structures with Applications
- Linear Algebra
- Mathematical Statistics using R
- Time Series Modelling (Theory & Practical)
- Complex Analysis
- Graph Theory
- Mechanics

EMPLOYABILITY & SKILL DEVELOPMENT

Enable students to apply mathematical concepts to real-world problems while developing technical and computational competencies for higher studies and careers.

- Computational Mathematics with SageMath (Theory & Practical)
- Programming with Python (Theory & Practical)
- Vector Analysis and Coordinate Geometry with Open Source Tool
- Introduction to Machine Learning with Python
- Resource Management and Optimisation Techniques with Tora

COURSES FOCUSING ON

EMPLOYABILITY

Equip students with industry-ready analytical, computational, and problem-solving skills for careers in data-driven industries, finance, cryptography, and research

- Financial Mathematics
- Mathematics of Cryptography
- Mathematical Modelling and Simulations
- Aptitude and Reasoning

TECHNICAL SKILL BASED ELECTIVES, VALUE ADDED COURSES & CERTIFICATE COURSES

Delivers industry-relevant competencies and certified expertise, preparing students for higher studies, research, and skill-intensive careers through confident, real-world application of knowledge.

- Mathematical Computing using Scilab
- Latex for Technical Writing
- Web Designing
- SQL
- Java Programming
- Computational Actuarial Science with R
- Foundations of Cyber Security(MTTF)
- Data Analytics with Python(MTTF)

SOFT SKILL TRAINING BY COGNIZANT

cognizant

Cognizant Nurture Her

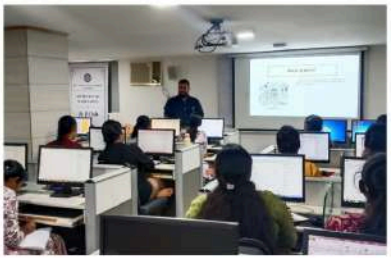
ACADEMIC AND INDUSTRY COLLABORATIONS

To further strengthen the academic excellence of the Department, a Memorandum of Understanding (MoU) has been established with the MathTech Thinking Foundation (M.T.T.F.). This collaboration underscores our commitment to excellence in STEM education and fosters a robust environment for innovation.

ACADEMIC ECOSYSTEM & HOLISTIC STUDENT DEVELOPMENT

Academic Excellence & Enrichment Activities

For Scholarly Advancement



Workshop Series

Faculty Development Programmes

National Mathematics Day Celebration

Seminars and Conferences

Student Enrichment & Skill Building Activities

for Professional Competence

Guest Lectures

Career Guidance Sessions

Paper Presentations by students

π-β Club

The π-β Club serves as a vibrant hub for discovering and nurturing students' innate talents. By organizing intramural and intercollegiate competitions that challenge logical and heuristic thinking, the club empowers students to excel beyond the classroom.

Organising Intramurals & Intercollegiate Events

Alumni Interaction Sessions

Research, Innovation & Creativity

Promoting knowledge Creation

ELIXIR - Department annual journal instills technical writing and research skills among students

Student Project Expo

Research oriented Industry/Library visits

Ganit Gyaan- community service initiatives

Organising Awareness Programmes

Community Outreach & Social Responsibility Activities

Fostering Social Impact

Extra Curricular/ Co-Curricular Excellence

Promoting Leadership Quality

Sports

Arts

NCC

CAREER SCOPE

Rooted in strong mathematical principles, the programme empowers students with limitless opportunities for growth and success.

05 **Government Services & Competitive Exams**
UPSC / State PSC | Statistical Services | Banking & SSC Exams

04 **Finance, Banking & Insurance**
Actuarial Analyst
Financial / Quantitative Analyst | Risk & Credit Analyst | CFA Pathway

03 **Information Technology & Computing**
Software Developer
Algorithm & Optimization Engineer
Cybersecurity / Cryptography Analyst

02 **Data Science & AI**
Data Analyst | Data Scientist | Business Intelligence Analyst | Machine Learning Associate | Azure Data Engineer

01 **Academic & Research Careers**
M.Sc./ Ph.D. via IIT JAM, ISI, CMI, TIFR
Academic Faculty | Research Scientist | Statistical Analyst

PROMINENT INTERNSHIPS

Indu Krishna C, Sandhya K & Gomathy R
Regional Meteorological Centre

Sriharipriya S
National Institute for Research in Tuberculosis

MTTS TRUST

INDIA METEOROLOGICAL DEPARTMENT

C.C.BANK
TRUSTED FOR SAFETY AND GROWTH

Kavini M
Mathematics Training & Talent Search Programme

Yogita N
Chennai Metro Rail Limited

TNPL

icmr | NIRT
INDIAN COUNCIL OF MEDICAL RESEARCH | NATIONAL INSTITUTE FOR RESEARCH IN TUBERCULOSIS

Apollo FOUNDATION

PROMINENT PLACEMENTS

On-Campus Job Fairs and Placement Drives for Direct Industry Engagement.

Our Prominent Recruiters

L&T | accenture | Infosys | SUTHERLAND | Deloitte. | Southern Railway | TATA CONSULTANCY SERVICES tcs | Goldman Sachs | cognizant | SAIJITH DIGITAL MARKETING | DOT UPSKILL ACADEMY | CHUBB | NielsenIQ | CTS | MAXSELL | EY | equitas Small Finance Bank | Indian Overseas Bank | iGATE ITOPS for Business Outcomes

PROUD ALUMNAE TESTIMONIALS

Ms. D SUGANYA (BATCH: 1994 -1997)
ADDITIONAL ASSISTANT DIRECTOR,
NATIONAL ACADEMY OF CUSTOMS, INDIRECT TAXES AND NARCOTICS, CHENNAI.

The Mathematics Department significantly strengthened my analytical abilities and problem-solving skills through innovative pedagogical approaches. Emphasis on conceptual clarity, practice, and application oriented learning enabled me to approach complex quantitative challenges with confidence and precision. Beyond academics, the holistic education imparted by the college nurtured resilience, perseverance, self-confidence, and ethical values. Dedicated faculty mentoring inspired consistency and self-belief, which helped me clear the SSC examination in my first attempt and join the Central Excise Department in Mumbai, The values instilled at M.O.P. Vaishnav College continue to guide me in discharging my duties as a responsible GST officer. Proud to be an MOPian.

Ms. ANITHA MANIKANDAN (BATCH: 2008-2011)
ENGINEERING MANAGER,
OMIO, BERLIN, GERMANY.

Studying at M.O.P. Vaishnav College gave me the opportunity to explore diverse mathematical concepts. 1 particularly enjoyed tackling integrals and algebraic problems. I also actively participated in mathematics quiz competitions, winning several prizes. Additionally, pursuing one computer science course each year helped me integrate programming with mathematical problem-solving.

Ms. LAKHSHIKHASHREE (BATCH: 2009-2012)
AZURE DATA ENGINEER,
NTT DATA, UK(LONDON).

My academic journey at M.O.P. Vaishnav College for Women in Mathematics with Programming skills strengthened my analytical, logical, and technical skills through a balanced mix of theory and practical learning. Participation in NSS and M.O.P. Community Radio enhanced my communication and confidence. The consistent mentorship and encouragement from my teachers played a crucial role in shaping my academic and personal growth.I remain deeply grateful to M.O.P. and department faculty for building a strong foundation for my professional Journey.

Ms. ANJANA (BATCH: 2010-2013),
SENIOR DOMAIN ANALYST,
BEROE CONSULTANCY.

As an alumna of M.O.P. Vaishnav College, My B.Sc. Mathematics programme equipped me with strong analytical and problem-solving skills. This foundation has been instrumental in my role as a senior domain Analyst at Beroe, where I leverage data-driven insights to optimize logistics and warehousing operations. I'm proud to be part of a community that fosters academic excellence and professional growth.

PROUD ALUMNAE TESTIMONIALS

Dr. SWATHI N R (BATCH: 2011-2014)
SENIOR AI SCIENTIST,
VERIZON.

My Journey from M.O.P. Vaishnav to a Senior Data Scientist. My time at M.O.P. Vaishnav laid a strong foundation for my academic and professional journey. The nurturing environment provided by our esteemed faculty encouraged critical thinking. problem-solving, and a relentless pursuit of knowledge. These skills were invaluable as I moved forward in my career. A special mention to my loving teachers whose guidance and support were pivotal in shaping my journey.

Dr. GAYATHRI RAMACHANDRAN (BATCH: 2013-2016)
POSTDOCTORAL RESEARCH ASSOCIATE,
NEW JERSEY INSTITUTE OF TECHNOLOGY, USA.

Courses such as Discrete Mathematics, Functional Mathematics, and Optimization Techniques have played a crucial role in strengthening my expertise in mathematical research. The conceptual depth and problem-solving skills I developed through these subjects continue to support my work as a Postdoctoral Research Associate at the New Jersey Institute of Technology, USA, where I focus on exploring innovative approaches in mathematical sciences.

Ms. HITHESWOREI B (BATCH: 2018-2021)
ACTUARIAL ANALYST,
WNS GLOBAL SERVICES.

The early stages of adulthood play an important role in shaping a person's thinking and future planning. My college and the Department of Mathematics have greatly influenced my growth during this period. The department helped me become strong not only academically but also in developing independence and confidence in decision-making. The teaching methods and workshops conducted by the department were very helpful. Along with mathematics, these sessions included related topics that guided me in understanding different areas of study. This exposure helped me gain clarity and make informed decisions about my future specialisation.

Ms. SARADHA SRUTHI (BATCH: 2021-2024)
BUSINESS ANALYST,
AMAZON.

Beginning my undergraduate studies from a Commerce background with no coding experience, I was introduced to C and R through the B.Sc. Mathematics programme. Clear faculty guidance built strong programming and analytical foundations, enabling me to confidently use Python and queries as a Business Analyst. I remain grateful to my department and M.O.P. for this transformative learning experience.

FACULTY PROFILE

Ms. Ramani B

Assistant Professor & Head
Teaching Experience: 23 years
Area of specialisation:
Chemical Graph Theory

Ms. Loganayaki T K

Assistant Professor
Teaching Experience: 20 years
Area of specialisation:
Stochastic Process

Dr. Jamuna Chezhian R

Assistant Professor
Teaching Experience: 21 years
Area of specialisation:
Stability of Functional and Differential Equations

Ms. Renuga E

Assistant Professor
Teaching Experience: 16 years
Area of specialisation:
Fractional Calculus

Dr. B. Kamalapriya

Assistant Professor
Teaching Experience: 6 years
Area of specialisation:
Fractional Differential Equations

Dr. Bhuvaneswari D

Assistant Professor
Teaching Experience: 9 years
Area of specialisation:
Graph Theory

Dr. Sridevi C.S

Assistant Professor
Teaching Experience: 2 years
Area of specialisation:
Stochastic Differential Equations

Dr. Kulandhai Therese A

Assistant Professor
Teaching Experience: 8 years
Area of specialisation:
Topology

Dr. Lavanya Y

Assistant Professor
Teaching Experience : 8 years
Area of specialisation :
Fuzzy Algebra

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Website: www.mopvc.edu.in