



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 Under Graduate Programme) Mathematics – The Root & Route to Success



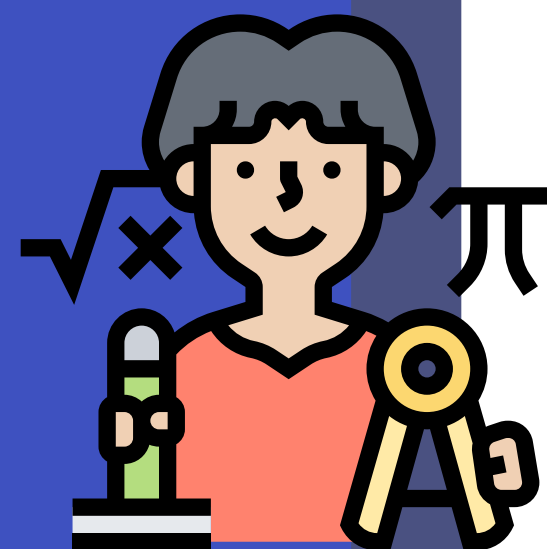
PROGRAMME OVERVIEW

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, computational tools and expert faculty, with their practical applications in fields such as computer science, finance, and actuarial science, make significant contributions to both academia as well as industry, highlighting the program's versatility and depth.

ELIGIBILITY- GRADE 12 STUDENTS FROM ANY ACADEMIC STREAM WHO HAVE COMPLETED A COURSE IN MATHEMATICS / BUSINESS MATHEMATICS /APPLIED MATHEMATICS

MULTI-DISCIPLINARY AND APPLICATION ORIENTED CURRICULUM

- Algebra & Trigonometry
- Differential Calculus
- Integral Calculus
- Differential Equations & Applications
- Vector Analysis & Co-ordinate Geometry of 3 Dimensions
- Mechanics
- Modern Algebra
- Real Analysis
- Number theory & Cryptography
- Fourier Series & Integral Transforms
- Linear Algebra
- Complex Analysis
- Optimization Techniques
- Graph Theory
- Mathematical Modelling



Allied & Elective Courses

- C Programming
- Computer Oriented Numerical Methods (Practical using C)
- Mathematical Statistics (Practical using R)
- Programming with Python
- Financial Mathematics
- Discrete Mathematics



Programme Highlights



MOU WITH MATHTECH THINKING FOUNDATION



To add credit to our department, we have signed an MoU with The MathTech Thinking Foundation (M.T.T.F.) which plays a crucial role in advancing STEM education and innovation.



π-β Students Club

A platform that identifies students talents and nurtures their skill through co-curricular activities

Prominent Placements and Internships



FRACTALS OF FAME



EXTENSION ACTIVITY

This activity transforms math learning into a dynamic, engaging experience—enhancing students' analytical skills and enthusiasm, while empowering educators with innovative, collaborative teaching methods that enrich the whole school community.



Journal- Elixir

Instills technical writing and research skills



FROM EQUATIONS TO EXCELLENCE



ACADEMICIAN

GRAPH ANALYST

FINANCIAL ANALYST

INSURANCE PROFESSIONAL & ACTUARY

DATA ANALYST & DATA SCIENTIST

CRYPT ANALYST

NOTABLE ALUMNAE

ACADEMICIAN



Ms. Varsha V
Pursuing Integrated Ph.D at
IISER, Bhopal

- At M.O.P., core courses such as Differential Equations, Integral Calculus, Number Theory, Modern Algebra, and Linear Algebra provided a solid foundation in essential undergraduate topics, playing a crucial role in preparing me for entrance exams. The mathematics faculty is highly supportive, actively promoting career-oriented activities. Additionally, the department's club fosters creativity by organizing a variety of math-related events, offering an enriching educational experience for students.



Ms. Anitha Valliappan
Pursuing Integrated Ph.D at
IISER, Trivandrum

- Courses like Discrete Mathematics, Functional Mathematics, and Optimization Techniques were impactful and crucial in opening up various career paths for me, as they covered a substantial portion of competitive exams. The solid foundation I built in the B.Sc Programme has been invaluable in my current pursuit of an integrated Ph.D in Mathematics.

RESEARCH ASSOCIATE



Dr. Poorna Pushkala
Postdoctoral Fellow, International
Centre for Theoretical Sciences,
Bengaluru

- The Department of Mathematics provided a strong foundation, shaping my research trajectory and equipping me with essential analytical skills. Courses like Graph Theory, Linear Algebra, and Mathematical Statistics were invaluable for my postdoctoral research, fostering critical thinking and problem-solving abilities. The department's rigorous academic environment has been instrumental in my growth, and I am confident it will continue to inspire future scholars in mathematics.



Dr. Gayathri Ramachandran
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.

DATA ANALYST



Ms. Gayathri V
Data Architect, Cognizant
Technology Solutions

- M.O.P. Vaishnav College for Women provided me with a strong mathematical foundation, which proved invaluable during my professional journey. The analytical and problem-solving skills I developed enabled me to navigate complex challenges in the financial sector. Today, as a professional at Cognizant Technology Solutions in Ontario, Canada, I leverage this expertise in automation, test strategy design, and data analytics. I am grateful to my alma mater for equipping me with the knowledge and skills that continue to drive my success in the industry.



Ms. Anitha Manikandan
Engineering Manager at Omio,
Berlin, Germany

- M.O.P. laid a strong foundation for my analytical and problem-solving skills, which have been instrumental in my professional journey. Faculty guidance and the department's rigorous academic environment fostered both technical proficiency and strategic thinking. Beyond academics, the institution's diverse opportunities enriched my perspective, equipping me to navigate complex challenges with confidence. M.O.P.'s holistic approach to education has been invaluable in shaping my career and leadership in the engineering domain.

FINANCIAL ANALYST



Ms. Sai Shruthi
Actuarial Analyst,
DXC Technologies

- M.O.P. Vaishnav College for Women has been instrumental in shaping my career, providing me with a strong mathematical foundation that continues to guide my professional journey. The practical and industry relevant subjects covered during my undergraduate studies equipped me with the analytical and problem-solving skills essential for my role as an Actuarial Analyst at DXC Technologies. The Mathematics Department, in particular, played a pivotal role in my growth, serving as a cornerstone for both my professional and personal development.



Ms. Shrija Chavali
Manager, ERM Operations,
Chubb Insurance, London.

- M.O.P. was not just an academic institution but a launchpad for analytical excellence and strategic thinking. The Mathematics department cultivated a mindset that goes beyond numbers—teaching me to decode complexities, assess risks, and drive solutions with clarity. Faculty mentorship instilled a balance of precision and adaptability, shaping my approach to decision-making in a constantly evolving industry. M.O.P.'s impact extends far beyond the classroom, equipping me with the confidence and foresight to navigate global challenges with resilience and expertise.