Post Graduate Teaching Department of Mathematics
Rashtrasant Tukadoji Maharaj Nagpur University

Department Profile

Academics:

Academic Programs	M.Sc. Mathematics		Ph.D. in Mathematics
Duration of Program	2 Years (Four Semester)		3-6 Years
Number of seats (Intake)	60		58 (4 Vacant)
Number of applications received last year	113		9 Applications for 8 Vacancies in last admission process
Actual Enrolment	60		4
Cut-off marks /rank of admission during last year	Open	70.30%	Not Applicable
	SC	54.83%	
	ST	63.42%	
	OBC	67.89%	
	VJ	59.00%	
	NT-B	66.72%	
	NT-C	64.94%	
	NT-D	64.58%	
Fees	₹ 3315/-		₹ 10000/-

Internship and Placements:

Number of programs with embedded internship in curriculum	**1**
Number of internships offered	**52**
Campus placement in Last year	**15**
Minimum Salary	**4.32 LPA**
Maximum Salary	**5.4 LPA**
Average Salary	**4.86 LPA**

Scheme of Examination for M.Sc. (Mathematics) as per NEP-2020

Semester	Courses	Mark Distribution			Total Marks	Credits
		ESE*	CIA*	Practical		
I	3 Mandatory	$3 \times 60 = 180$	$3 \times 40 = 120$		**550**	**22**
	1 Elective	$1 \times 60 = 60$	$1 \times 40 = 40$			
	1 Research Methodology	$1 \times 30 = 30$	$1 \times 20 = 20$	$1 \times 50 = 50$		
	C Programming			$1 \times 50 = 50$		
II	3 Mandatory	$3 \times 60 = 180$	$3 \times 40 = 120$		**550**	**22**
	1 Elective	$1 \times 60 = 60$	$1 \times 40 = 40$			
	1 On Job Training			$1 \times 100 = 100$		
	R programming			$1 \times 50 = 50$		
III	3 Mandatory	$3 \times 60 = 180$	$3 \times 40 = 120$		**550**	**22**
	1 Elective	$1 \times 60 = 60$	$1 \times 40 = 40$			
	1 Research Project (Minor)			$1 \times 100 = 100$		
	Python Programming			$1 \times 50 = 50$		
IV	2 Mandatory	$2 \times 60 = 120$	$2 \times 40 = 80$		**550**	**22**
	1 Elective	$1 \times 60 = 60$	$1 \times 40 = 40$			
	1 Research Project (Major)			$1 \times 150 = 150$		
	MATLAB programming	$1 \times 30 = 30$	$1 \times 20 = 20$	$1 \times 50 = 50$		
	Total	**960**	**640**	**600**	**2200**	**88**

***ESE – End Semester Examination (Theory), *CIA – Continuous Internal Assessment**

Semester wise Courses

Semester	Compulsory Papers	Elective Papers (Any One)	Practical
I	Algebra Topology Ordinary Differential Equations Research Methodology in Mathematics	Mathematical Statistics Fuzzy Mathematics Applied Combinatorics Integral Equations Equivalent MOOC Course	Practical 1: C-Programming Practical 2: Research Methodology in Mathematics
II	Real Analysis Fluid Dynamics Partial Differential Equations	Design of Experiments Linear Programming Advanced Discrete Mathematics Linear Algebra and Differential Equations Equivalent MOOC Course	Practical 3: R-Programming Practical 4: On Job Training
III	Complex Analysis Functional Analysis Advance Numerical Methods	Non-parametric Methods and Multivariate Analysis Inventory Control and Network Analysis Dynamical System Measure and Integration Theory Equivalent MOOC Course	Practical 5: Programming with Python Research Project (Minor)
IV	Differential Geometry Use of Integral Transforms MATLAB Programming	Industrial Processes Operation Research Cryptography Number Theory Equivalent MOOC Course	Practical 6: MATLAB Programming Research Project (Major)

Infrastructure:

Class rooms	2 (Size: 25’ X 21’ each)
Computer Centers	2 (Capacity: 15+45)
Computing Facilities	MATLAB: 10 users, Maple: 10 users

Description on Teaching learning evaluation process:

Department employs a dynamic teaching-learning evaluation process, seamlessly integrating modern technology with traditional pedagogical methods. Utilizing state-of-the-art smart boards, our educators engage students in interactive and visually stimulating lessons, fostering a deeper understanding of mathematical concepts. Complementing classroom instruction, our digital platform, Google Classroom, serves as a centralized hub for study materials, quizzes, and assignments, enhancing accessibility and collaboration among students and instructors alike. Through this integrated approach, we cultivate a vibrant learning environment that empowers students to excel in mathematics and beyond.

Title of each course and Laboratory facilities exclusive to post graduate course:

- Fundamentals of Computer and C-Programming
- Research Methodology in Mathematics
- Software and Programming
- MATLAB-Programming
- Programming with Python