

M.Sc. Mathematics

Programme Structure



Division	Faculty of Sciences and Health Sciences			
School Name	School of Science and Environmental Studies			
Department Name	Department of Mathematics and Statistics			
Programme Name	M.Sc. Mathematics			

# **Credit Distribution**

Course Type	Description
Programme Core	Courses dealing with foundations, depth and breadth of the major in which a student is admitted at MIT-WPU
Programme Electives	Open electives under the Programme allow students to specialise in a particular area connected to their major.
University Core	Courses that reflect the core MITWPU values and the mission of Life Transformation of students.
University Electives	Multidisciplinary courses across the faculties at MIT-WPU and outside the Programme core.

#### Semester 1

Course Code	Name of the Course	Туре		Weekly Workload, Hrs			Credits	
Course Code		ТЭРС	L	Т	Р	7	Cicaits	
SMM7PF01A	Linear Algebra	PF	2	1	-	1	3	
SMM7PF02A	Real Analysis	PF	3	1	-	-	4	
SMM7PM01A	Group Theory	PM	2	-	-	-	2	
SMM7PM02A	Ordinary Differential Equations	PM	2	-	-	-	2	
SMM7PM03A	Research Methodology	PM	4		-	-	4	
	Programme Elective-01	PE	3	-	2	-	4	
PCE7UC01A	Scientific Studies of Mind, Matter, Spirit and Consciousness	UC	2	-	-	-	2	
YOG7UC01A	Yoga	UC	-	\-	2	ı	1	

## **Elective Tracks**

	Track 1: SMM7PE11A	Track 2: SMM7PF21A
Elective Track	Computational Mathematics	Statistics & Industrial Mathematics
Name of the course	Numerical Methods	Statistical Inference

# Semester 2

Course Code	Name of the Course	Туре		kly Wo	rkload,	Hrs	Credits
Course Code		Type	L	Т	Р	7	Credits
SMM7PM04A	Complex Analysis	PM	3	-	-	1	3
SMM7PM05A	Measure Theory	PM	3	1	-	-	4
SMM7PM06A	Partial Differential Equations	PM	2	-	-	-	2
SMM7PM07A	Probability & Statistics + Python Lab	PM	2	-	2	-	3
SMM7PM08A	Ring Theory	PM	2	-	-	-	2
SMM7PM09A	Topology	PM	2	-	-	-	2
	Programme Elective-02	PE	3	1	-	ı	4
PCE7UC02A	Peacebuilding: Global Initiatives	UC	2	-	-	-	2

# Elective Tracks

	Track 1: SMM7PE12A	Track 2: SMM7PE22A
Elective Track	Computational Mathematics	Statistics & Industrial Mathematics
Name of the course	Algorithm	Graph Theory

## Semester 3

Course Code	Name of the Course	Туре	Weekly Workload, Hrs				Credits
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SMM8PM01A	Advanced Calculus	PM	2	-	-	-	2
SMM8PM02A	Field Theory	PM	2	_	-	-	2
SMM8PM03A	Functional Analysis	PM	3	1	-	-	4
SMM8PM04A	Machine Learning	PM	3	-	2	-	4
	Programme Elective-03	PE	3	1	-	-	4
SMM8PR01A	On Job Training (OJT)/ Internship	PR	-	-	-	12	4
SMM8PR02A	Project	PR	-	-	-	6	2

## **Elective Tracks**

	Track 1: SMM8PE11A	Track 2: SMM8PE21A
Elective Track	Computational Mathematics	Statistics & Industrial Mathematics
Name of the course	DBMS	Regression Analysis

## Semester 4

Course Code Name of the Course Typ		Туре	Weekly Workload, Hrs				Credits
000100 0000		1900	L	т	Р	J	
SMM8PM05A	Financial Mathematics	PM	3	1	-	-	4
	Programme Elective-04	PE	3	1	-	1	4
SMM8PR03A	Project / Industrial Internship	PR	-	-	-	36	12

#### **Elective Tracks**

	Track 1: SMM8PE12A	Track 2: SMM8PE22A
Elective Track	Computational Mathematics	Statistics & Industrial Mathematics
Name of the course	Data Mining	Operations Research

\*Modifications to the programmes and courses are contingent upon adherence to university guidelines and procedures. Any proposed changes must undergo a thorough review process, including consultation with relevant academic departments, approval from the appropriate administrative bodies, and compliance with accreditation standards.

Additionally, consideration will be given to feedback from students, faculty, and other stakeholders to ensure that modifications align with the overall educational objectives and mission of the university. The implementation of any approved changes will be communicated transparently to the university community, and appropriate measures will be taken to facilitate a smooth transition for all affected parties.