

# DEPARTMENT OF MATHEMATICS

## UNIVERSITY OF KASHMIR

(NAAC Accredited Grade A+ University)

Hazratbal Srinagar-190006

Jammu and Kashmir



### Syllabus and Course Structure of 4-year Bachelor's Degree with Mathematics/Applied Mathematics as Major/Minor (NEP-2020)

#### Members of UG Board of Studies

<b>Dr. Mukhtar A. Khanday</b> Professor & Head Department of Mathematics University of Kashmir (Chairman)	<b>Dr. S. Pirzada</b> Professor Department of Mathematics University of Kashmir (Member)	<b>Dr. N. A. Rather</b> Professor Department of Mathematics University of Kashmir (Member)	<b>Dr. M. H. Gulzar</b> Professor Department of Mathematics University of Kashmir (Member)
<b>Dr. B.A Zargar</b> Professor Department of Mathematics University of Kashmir (Member)	<b>Dr. Tariq A Chisti</b> Professor (Mathematics) Directorate of Distance Edu. University of Kashmir (Member)	<b>Dr. Aijaz A. Bhat</b> Associate Professor Department of Mathematics ICSC, Hawal Srinagar (Member)	<b>Dr. M.A. Mir</b> Associate Professor Department of Mathematics University of Kashmir (Member)
<b>Prof. Mujeeb A. Kawoosa</b> Associate Professor Department of Mathematics AS College, Srinagar (Member)	<b>Dr. Nisar A. Lone</b> Sr. Assistant Professor JKIMS, Srinagar (Member)	<b>Prof. Mohammad Hasan Shahid</b> Department of Mathematics Jamia Millia Islamia, New Delhi (Member)	
<b>Dr. Farooq A. Sheikh</b> Assistant Professor Department of Mathematics GWC Nawakadal, Srinagar (Special Invited Member)	<b>Mr. Mudasir A. Bhat</b> Assistant Professor Department of Mathematics GDC (Boys), Anantnag (Special Invited Member)	<b>Dr. M. Iqbal Bhat</b> Associate Professor Department of Mathematics University of Kashmir- South Campus (Special Invited Member)	

(Meetings held on 31.05.2023 & 11.08.2023)

**(For Honor's Degree in Mathematics/Applied Mathematics  
& Honor's with Research mode)**

Semester - I	Major: <b>Calculus-I</b> (MMT122J)- 6 credits Minor: <b>Calculus-I</b> (MMT122N)- 6 Credits	---	---
Semester – II	Major: <b>Calculus-II</b> (MMT222J)-6 Credits Minor: <b>Calculus - II</b> (MMT222N)-6 Credits	---	---
Semester – III	Major: <b>Theory of Matrices</b> (MMT322J)- 6 Credits Minor: <b>Theory of Matrices</b> (MMT322N)- 6 Credits	---	---
Semester – IV	Major: <b>Real Analysis – I</b> (MMT422J1)- 4 Credits Minor: <b>Real Analysis - I</b> (MMT422N)- 4 Credits	Major: <b>Geometry</b> (MMT422J2)- 6 Credits	Major: <b>Theory of Numbers</b> (MMT422J3)- 6 Credits
Semester – V	Major: Algebra – I (MMT522J1)-4 Credits Minor: Algebra - I (MMT522N)-4 Credits	Major: Mathematical Modeling and Numerical Methods (MMT522J2) - 6 Credits	Major: Fourier & Laplace Transforms (MMT522J3)- 6 Credits
Semester – VI	Major: Graph Theory (MMT622J1)- 4 Credits Minor: Graph Theory (MMT622N)- 4 Credits	Major: Differential Equations (MMT622J2)- 6 Credits	Major: Advanced Calculus (MMT622J3)- 6 Credits
Semester – VII	Major: Linear Algebra (MMT722J1)-4 Credits Major: Linear Algebra (MMT722N)-4 Credits	Major: Algebra-II (MMT722J2) (4+2) credits	Major: Real Analysis – II (MMT722J3)- 6 Credits
Semester - VIII	Major: Complex Analysis – I (MMT822J1)- 4 Credits Minor: Complex Analysis – I (MMT822N)- 4 Credits	Major: Metric & Topological Spaces (MMT822J2)- 6 Credits	Major: Mathematical Statistics (MMT822J3)- 6 Credits

**For Research Mode**

Semester – VII	Major: <b>Linear Algebra</b> (MMT722J4)-4 Credits	Major: <b>Algebra-II</b> (MMT722J5)-(6) credits	Major: <b>Real Analysis – II</b> (MMT722J6)- (6) credits
Semester - VIII	Major: Complex Analysis – I (MMT822J1) - (4) Credits	Major: Research Methodology* (MMT822J2) - (4) Credits	** <b>Project Dissertation</b> (MMT822JP) - (8) Credits

A collection of handwritten signatures and notes. On the left, there are several signatures, including one that appears to be 'Ducuan' and another that looks like 'Dawson'. In the center, there is a signature that says 'Dr. Hasan Shabir' with a line underneath. To the right, there are more signatures, including one that says 'by' and another that says 'Kawad'. At the bottom right, there is a signature that says 'Chun' and another that says 'Ash' with an arrow pointing to it.