

SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICS
NEP 2020 - Course Structure

Programme Name: - Master of Science (Mathematics)
Semester – I (Level 6.0)

Batch: AY 23-24 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Cours e	Lab	
1	UC	NRDP101	Research Methodology	4	0	0	4	50	-	100	-	100
2	PC	NPMT101	Advanced Calculus	4	0	0	4	50	-	100	-	100
3	PC	NPMT102	Numerical Analysis	4	0	0	4	50	-	100	-	100
4	PC	NPMT103	Computational Mathematics I	2	-	-	2	50	0	100	0	100
5	PC	NPMT111	Computational Mathematics I Lab	0	0	4	2		50	-	100	100
6	PE	NPMTE__	Programme Elective-I	4	0	0	4	50	-	100	-	100
TOTAL				18	-	4	20	250	50	500	100	600

Course Code	Programme Elective I
NPMTE01	Abstract Algebra
NPMTE02	Ordinary Differential Equations
NPMTE03	Linear Algebra

		Formative Assessment		
CIA: Continuous Internal Assessment L: Theory Lecture T: Tutorial P: Practical ESE: End Semester Exam	UC: University Core PC: Programme Core PE: Programme Elective OE: Open Elective	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity/Project and research based learning along with seminar presentation
		CIA 4	10%	Behavioural Attitude +General Discipline Theory +Practical attendance
		TOTAL	50%	

SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICS
NEP 2020 - Course Structure

Programme Name: - Master of Science (Mathematics)
Semester – II (Level 6.0)

Batch: AY 23-24 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMT201	Complex Analysis	4	0	0	4	50	0	100	0	100
2	PC	NPMT202	Topology	4	0	0	4	50	0	100	0	100
3	PC	NPMT203	Computational Mathematics II	2	-	-	2	50	0	100	0	100
4	PC	NPMT212	Computational Mathematics II Lab	0	0	4	2		50	—	100	100
5	PE	NPMTE__	Programme Elective-II	4	0	0	4	50	0	100	0	100
6	PC	NPMT211	Field Project/Internship	0	0	8	4	-	50	-	100	100
TOTAL				14	00	12	20	200	100	400	200	600

Course Code	Programme Elective II
NPMTE04	Partial Differential Equations
NPMTE05	Integral Transforms and their Applications
NPMTE06	Number Theory

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity/Project and research based learning along with seminar presentation
		CIA 4	10%	Behavioural Attitude +General Discipline Theory +Practical attendance
		TOTAL	50%	

Exit option: PG Diploma with 40 credits.

BOS
Chairperson

Dean
SOS

Associate Dean
Academics

Registrar
SUN

SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICS
NEP 2020 - Course Structure

Programme Name: - Master of Science (Mathematics)

Semester – III (Level 6.5)

Batch: AY 23-24 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMT301	Functional Analysis	4	0	0	4	50	0	100	0	100
2	PC	NPMT302	Mathematical statistics	4	0	0	4	50	0	100	0	100
3	PC	NPMT303	Data Science & Machine Learning	2	-	-	2	50	0	100	0	100
4	PC	NPMT311	Data Science & Machine Learning Lab	0	0	4	2		50	_	100	100
5	PE	NPMTE__	Programme Elective-III	4	0	0	4	50	0	100	0	100
6	PC	NPMT312	Research Project I	0	0	12	6	-	50	-	100	100
TOTAL				14	00	16	22	200	100	400	200	600

Course Code	Programme Elective III
NPMTE07	Discrete Mathematics
NPMTE08	Mathematical Modelling
NPMTE09	Integro-Differential Equations

		Formative Assessment		
CIA: Continuous Internal Assessment L: Theory Lecture T: Tutorial P: Practical ESE: End Semester Exam	UC: University Core PC: Programme Core PE: Programme Elective OE: Open Elective	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity/Project and research based learning along with seminar presentation
		CIA 4	10%	Behavioural Attitude +General Discipline Theory +Practical attendance
		TOTAL	50%	

SCHOOL OF SCIENCE
DEPARTMENT OF MATHEMATICS
NEP 2020 - Course Structure

Programme Name: - Master of Science (Mathematics)
Semester – IV (Level 6.5)

Batch: AY 23-24 onwards

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPMT401	Graph Theory	4	0	0	4	50	0	100	0	100
2	PC	NPMT402	Advanced Numerical Methods	4	0	0	4	50	0	100	0	100
3	PE	NPMTE__	Programme Elective-IV	4	0	0	4	50	0	100	0	100
4	PC	NPMT411	Research Project II	0	0	20	10	-	50	-	100	100
TOTAL				12	00	20	22	150	50	300	100	400

Course Code	Programme Elective IV
NPMTE10	Fluid Mechanics
NPMTE11	Special Functions
NPMTE12	Operations Research

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity/Project and research based learning along with seminar presentation
		CIA 4	10%	Behavioural Attitude +General Discipline Theory +Practical attendance
		TOTAL	50%	