

**TRIPURA UNIVERSITY**  
**DEPARTMENT OF MATHEMATICS**  
**MSc IN MATHEMATICS CURRICULUM-2020**  
**CHOICE BASED CREDIT SYSTEM(CBCS)**

**CORE COURSES**

<b>Course Code</b>	<b>Name of the Courses</b>	<b>Credits</b>
MATH 701C	Linear Algebra	4
MATH 702C	Real Analysis	4
MATH 703C	Complex Analysis	4
<b>MATH 704C</b>	<b>Ordinary Differential Equations</b>	<b>4</b>
MATH 801C	Abstract Algebra	4
MATH 802C	Topology	4
MATH803C	Integral Equations and Calculus of Variations	4
MATH 901C	Functional Analysis	4
MATH 902C	Numerical Analysis	4
<b>MATH 903C</b>	<b>Partial Differential Equations</b>	<b>4</b>
MATH 904C	Project-I	4
MATH 1001C	Lebesgue Measure and Integration	4
MATH 1002C	Computer Programming with practical	4
MATH 1003C	Project-II	4

**DEPARTMENTAL ELECTIVE COURSES**

<b>Course Code</b>	<b>Name of the Courses</b>	<b>Credits</b>
MATH 705E	Operations Research	4
MATH 706E	Logic	4
<b>MATH 707E</b>	<b>Mathematical Finance</b>	<b>4</b>
MATH 708E	Fuzzy Set Theory	4

MATH 805E	Category Theory	4
MATH 806E	Discrete Mathematics	4
MATH 807E	Fuzzy Logic and Applications	4
MATH 808E	Dynamical Systems	4
MATH 905E	Fuzzy Topology	4
MATH 906E	Set Theory	4
MATH 907E	Differential Topology	4
MATH 908E	Rough Sets and Applications	4
MATH 909E	Abstract Measure Theory	4
MATH 1004E	Classical Mechanics and Fluid Mechanics	4
MATH 1005E	Sequence Space, Summability Theory and its Applications	4
MATH 1006E	Riemannian Geometry	4
MATH 1007E	Algebraic Topology	4
MATH 1008E	Number Theory	4
MATH1009E	Advanced Topology	4
MATH 1010E	Graph Theory	4
MATH 1011E	Fixed Point Theory	4

#### Compulsory foundation courses

Course Code	Name of the Courses	Credits
MATH804FC	Computer Skills II	4

### Elective foundation courses

Course Code	Name of the Courses	Credits
	Craft Work-Jute(Fine Arts Dept)	2
	Craft Work-Bamboo(Fine Arts Dept)	2
	Creative Painting(Fine Arts Dept)	2
	Creative Sculpture(Fine Arts Dept)	2
	Aesthetics of Music(Music Dept.)	4
	Yoga(Physical Education Dept.)	2
	Communicative English(English Dept.)	2
	NSS	2
	Social Services	2

A student has to earn minimum 80 credits for getting the Degree of MSc in Mathematics. In one semester a student can earn maximum 24 credits. A student have to earn 56 Credits from core courses of the concerned Department, minimum 20 credits from elective papers in which minimum 4 credits is to be earned from other Department and 4 credits from compulsory Foundation Course. Elective Foundation can be taken by a student out of his/her own interest, which is not compulsory.

### CORE COURSES

SEMESTER I	SEMESTER II
<b>MATH701C: LINEAR ALGEBRA</b> <b>MATH702C: REAL ANALYSIS</b> <b>MATH703C: COMPLEX ANALYSIS</b> <b>MATH704C: ORDINARY DIFFERENTIAL EQUATIONS</b>	<b>MATH801C: ABSTRACT ALGEBRA</b> <b>MATH802C: TOPOLOGY</b> <b>MATH803C: INTEGRAL EQUATIONS AND CALCULUS OF VARIATION</b>
SEMESTER III	SEMESTER IV
<b>MATH901C: FUNCTIONAL ANALYSIS</b> <b>MATH902C: NUMERICAL ANALYSIS</b> <b>MATH903C: PARTIAL DIFFERENTIAL EQUATIONS</b> <b>MATH904C PROJECT-I</b>	<b>MATH1001C: LEBESGUE MEASURE AND INTEGRATION</b> <b>MATH1002C: COMPUTER PROGRAMMING WITH PRACTICAL</b> <b>MATH1003C: PROJECT-II</b>