

NATIONAL COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-1
M.Sc. MATHEMATICS-COURSE STRUCTURE UNDER CBCS PATTERN
(For the candidates admitted from the Academic year 2025 onwards)

SEM	CODE	COURSE	COURSE TITLE	Instruction Hrs./Week	Credits	Exam Hrs.	Internal Marks	External Marks	Total Marks
I	P25MS1	CORE I	LINEAR ALGEBRA	6	5	3	25	75	100
	P25MS2	CORE II	REAL ANALYSIS	6	5	3	25	75	100
	P25MS3	CORE III	MATLAB PROGRAMMING THEORY	6	5	3	25	75	100
	P25MS4P	CORE IV	MATLAB PROGRAMMING LAB	6	5	3	25	75	100
	P25MS5E	CBE I	A.NUMERICAL ANALYSIS B. MATHEMATICAL MODELLING C.TENSOR ANALYSIS	6	3	3	25	75	100
II	P25MS6	CORE V	ALGEBRA	6	5	3	25	75	100
	P25MS7	CORE VI	ORDINARY DIFFERENTIAL EQUATIONS	6	5	3	25	75	100
	P25MS8	CORE VII	COMPLEX ANALYSIS	6	5	3	25	75	100
	P25MS9ETP P25MS9E P25MS9E	CBE II	A. PYTHON PROGRAMMING WITH LAB B. FUZZY ANALYSIS C. OPERATOR THEORY	6	3	3	40 25 25	60 75 75	100
	P25MS10ETP P25MS10ETP P25MS10E		CBE III	A. PROBABILITY AND STATISTICS WITH R PROGRAMMING LAB B. APPLIED STATISTICS WITH RPROGRAMMING LAB C. AUTOMATA THEORY	6	3	3	40 40 25	60 60 75
	P25MS11	CORE VIII		PARTIAL DIFFERENTIAL EQUATIONS	6	5	3	25	75
	P25MS12	CORE IX	MEASURE THEORY AND INTEGRATION	6	5	3	25	75	100
P25MS13	CORE X	CLASSICAL DYNAMICS	6	5	3	25	75	100	
III	P25MS14	CORE XI	TOPOLOGY	6	5	3	25	75	100
	P25MS15E	CBE IV	A. OPTIMIZATION TECHNIQUES B. GRAPH THEORY C.THEORY OF NUMBERS	6	3	3	25	75	100
	P25MS16	CORE XII	FUNCTIONAL ANALYSIS	6	5	3	25	75	100
	P25MS17	CORE XIII	DIFFERENTIAL GEOMETRY	6	5	3	25	75	100
	P25MS18	CORE XIV	INTEGRAL EQUATIONS AND CALCULUS OF VARIATIONS	6	5	3	25	75	100
IV	P25MS19E	CBE V	A. STOCHASTIC PROCESSES B. PROBABILITY AND STATISTICS WITH QUEUEING THEORY C. DESIGN AND ANALYSIS OF ALGORITHMS	6	3	3	25	75	100
	P25MSP20		PROJECT	6	5		75	25	100
	GRAND TOTAL					90			

