Course Outcomes (CO) for Bachelor of Science in Mathematics

CO1: Communication Skills: Ability to explain the development of mathematics in the civilization context and its role as queen of all sciences.

CO2: Critical thinking and analytical reasoning: Ability to analyze the results and apply them in various problems appearing in different branches of mathematics.

CO3: Problem solving: Capacity to solve problems like various ecological and radioactive models, linear programming problems, network flow problems in computer using various concepts of mathematics.

CO4: Research-related skill: To know about the advances in various branches of mathematics.

CO5: Information/digital literacy: Capacity to understand, use and apply appropriate software for mathematical investigations and problem solving.

CO6: Self-directed learning: Ability to work independently and do in-depth study of various notions of mathematics.

CO7: Moral and ethical awareness: Moral and ethical awareness and reasoning are imparted through the various courses.

CO8: Lifelong learning: Ability to think, acquire knowledge and skills through logical reasoning and to inculcate the habit of self-learning.

CO9: Experiential learning: hands on experience for problem solving and programming.

CO10: Disciplinary knowledge: Capability of demonstrating comprehensive knowledge of mathematics and understanding of one or more disciplines which form a part of an undergraduate programme of study.

Course Specific Outcomes (CSO)

CSO	CO1	CO2	CO3	CO4	CO5	CO6	CO7	CO8	CO9	CO10
CC-1: Calculus, Geometry & Vector Analysis		√		√			√			
CC-2: Algebra			√				√			
CC-3: Real Analysis	√	√		√			√			
CC-4: group Theory – I		√	√			√	√			
CC-5: Theory of Real Functions	√	√	√				√			
CC-6: Ring Theory and Linear Algebra-I	√	√	√			√	√			
CC-7:ODE & Multivariable Calculus-I			√	√			√			√
CC-8: Riemann Integration & Series of Functions		√	√			√	√			
CC-9: PDE & Multivariate Calculus-II	√		√	√			√	√		√
CC-10: Mechanics	√		√				√	√		√
CC-11: Probability & Statistics	√	√	√				√	√		√
CC-12: Group Theory-II & Linear Algebra-II			√	√			√			
CC-13: Metric Space & Complex Analysis		√				√	√	√		
CC-14: Numerical Methods	√		√	√	√		√	√	√	√

DSE-A1: Advance Algebra		√				√	√	√		
DSE-A2: Mathematical Modelling	√	√	√			√	√	√		
DSE-B1: Linear Programming & Game Theory	√	√	√			√		√		
DSE-B2: Point Set Topology				√			√			
SEC-A: C Programming Language	√		√		√	√		√	√	√
SEC-B: Scientific Computing and Sage Math	√		√	√	√			√	√	√