

### M.Sc Programme outcome

On completion of the programme the students should have gained knowledge in different subject areas which includes abstract subjects, application oriented subjects and applicable subjects. The outcome of the programme is to enhance employability and research

S.No	Subject code	Subject Name	Course specific outcome
1	1MS01a	Abstract algebra I	Enhance the abstract thinking that pervades modern analysis
2	1MS02	Real analysis I	It provides an extension of Riemann integral to Reimann stieltjes integral
3	1MS03	Complex Analysis I	Students will be equipped with understanding of contour integration, using residue calculus, harmonic functions, bilinear transformations and conformal mapping.
4	1MS04	Classical Mechanics	Students will have a strong background in abstract and intellectually satisfying areas of dynamical theory
5	1MS05a	Advanced Differential Equations	This course introduces students to the modern theory and methods of ordinary and partial differential equations. A large number of real life problems can be modelled using differential equations, making the subject one of the most widely applicable areas of Mathematics.
6	2MS06a	Abstract Algebra II	It provides a transition from elementary calculus to advanced courses in real and complex functions
7	2MS07a	Real Analysis II	It deals with integrals in space and measurable functions.
8	2MS08a	Complex Analysis II	Gives extensive knowledge about Riemann zeta function, Harmonic function and Elliptic function

9	2MS09a	Operations Research I	OR techniques can be applied in industrial Government and Business problems to provide better quantitative information for making decisions.
10	2MS10a	Topology	Introduces basic set theoretic definition and fundamental concepts in point-set topology and lays foundation for other branches of topology like differential topology, geometric topology and algebraic topology.
11	3MS11b	Differential Geometry	Differential Geometry uses calculus to study the properties of geometric configuration by focussing on theory of curves and surfaces
12	3MS12a	Probability and Distributions	Gives optimum knowledge about hypergeometric , polya and Beta distributions
13	3MS13a	Advanced Discrete Mathematics	To apply rules of inference, test for validity and methods of proof including direct and indirect forms, proof by contradiction , mathematical induction and write proof using symbolic logic and Boolean algebra.
14	3MSE1b	Fuzzy sets & Applications	Provide and understanding of the basic Mathematical elements of the theory of the fuzzy sets. Provide and emphasis on the differences and similarity between fuzzy sets and classical set theories.
15	3MSE2b	Operations Research II	It aims at introducing the students to some operational research methods that are used in the systems approach to

			Engineering and Management, so as to provide them with the tools for the Mathematical representation of decision making problems.
16	4MS14	Functional Analysis	Able to understand operators on Banach spaces and Hilbert spaces
17	4MS16a	Advanced Graph Theory	To understand the language of graphs and trees and to use graphs and solve postman problem, travelling salesman problem and many real life problems.
18	4MSE3b	Number theory & Cryptography	To give an introduction to elementary number theory for application in cryptography which is used for protecting information transmitted through public communication networks.
19	4MSE4	Stochastic Processes	Knowledge to analyse problems in Renewal processes and stationary processes.