

Course	Expected outcome
MTMACOR01T:Calculus	Students will be able to get an idea with - Plotting of graphs of function - Plotting the graphs of polynomial of degree 4 and 5,the derivative graph, the second derivative graph and comparing them - Sketching parametric curves - Obtaining surface of revolution of curves
MTMACOR07P: Numerical Methods Lab	Familiarity with - Linear algebraic computations, data analysis, signal processing - Optimization - Numerical solutions of ordinary differential equations - Quadrature, 2D & 3D graphics. - Types of scientific computation.
MTMADSE01T:Linear Programming	Students will be able to get an idea with - By converting a primal problem into dual - Gives additional information as to how the optimal solution changes as a result of the changes in the coefficients. - Economics interpretation of dual helps the management in making future decisions. - Duality is used to solve L.P problems in which the initial solution in infeasible.
MTMACOR13T: Metric Spaces and Complex Analysis	Introduction to - Closeness between points in a set - Limits, convergence ,open sets and closed sets. - Characterization of Banach spaces, Fixed point theorem - Demonstrate understanding of the basic concepts underlying complex analysis - The study of holomorphic functions and their most important basic properties.
MTMGCOR01T & MTMHGEC01T : Differential Calculus	Students will be able to get an idea with - A secant line is that its slope can be calculated directly. - Limits, continuity, derivatives and derivatives applications - Finding a function is increasing or decreasing functions in a graph - Maximum and minimum value of a graph.
MTMSSEC01M: C-Programming Language	Familiarity with - The first operating system to be developed using a high level programming language - Design the system software like operating system and compiler. - Creating computer applications. - Developing system applications.
MTMSSEC02M : Logic and Sets	Familiarity with - Definition of sets and different types of sets - Subset and their properties - Relation and partition on Sets and their relation - Definition of Proposition with connectives - D.N. F and C.N.F with examples
MTMGCOR04T & MTMHGEC04T : Algebra	Introduction to - Definition of groups and different type of groups. - Subgroups and their properties.

	• Cyclic groups and Permutation groups. • Finite abelian group and their property. • Rings and fields with classification.
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MTMACOR02T: Algebra	Students will be able to get an idea with • Relation and Partition on Sets and their relation. • Existence of solution of system of Linear equations. • Basic concept of Matrix theory.
MTMACOR03T: Real Analysis	Familiarity with • Classification of subsets of Real numbers. • Idea of open set and closed set in $\mathbb{R}$ with various result. • The concept of Series and Sequence and their convergence.
MTMACOR06T: Group Theory-I	Introduction to • Definition of groups and different type of groups. • Subgroups and their properties. • Cyclic groups and Permutation groups. • Finite abelian group and their properties. • Group homomorphism.
MTMACOR10T: Ring Theory & Linear Algebra-I	Familiarity with • Rings and Fields with classification. • Vector spaces and their subspaces with geometrical concepts. • Matrix basically is a representation of linear function on Vector spaces.
MTMACOR12T: Group Theory-II	Students will be able to learn an idea with • Application of factor groups to automorphism groups. • Fundamental Theorem of finite abelian group. • Application of group actions. • Application of Sylow's Theorem.
MTMACOR14T: Ring Theory & Linear Algebra-II	Students will be able to get an idea with • Reducibility and irreducibility test of polynomials. • Diagonalizability of square matrices. • Gram-Schmidt orthogonalisation process. • Minimal solution of system of linear equations.
MTMGCOR03T: Real Analysis	Familiarity with • Classification of subsets of Real numbers. • Idea of open set and closed set in $\mathbb{R}$ with various result. • The concept of Series and Sequence and their convergence.

