DEPARTMENT OF MATHEMATICS

Programme Outcome	The goal of this program is to make student talented and they can utilize their knowledge in various fields such as Engineering, aerospace, weather forecast Education Planning, Numerical Computation and in almost all science field.
Specific Program Outcome	It offers excellent opportunity for students with deeper understanding of fundamental topics in Mathematics such as Algebra and Number Theory calculus and integration, Differential Equations, complex Analysis and Improper Integrals and Graph Theory and Numerical Analysis.

COURSE OUTCOMES	
COURSE	**OUTCOMES**
Complex Numbers	The students upon successful completion course will have good understanding Real and imaginary numbers. They would used in De-Moivere's Theorem and its application are in electronics.
Theory of Equations	After the Completion of this course, the student could be able to describe methods of solutions, the existence or non-existence of roots, the relation between roots and the coefficients.
Matrices	The students learnt • The basic rule in elementary transformations of a matrix. • Techniques to compute the Rank of a matrix. • The students get through introduction to row reduces echelon form and normal form of matrix and its inverse. • Solving linear equations, working with matrices, in particular Eigen values and eigen vectors and applying the same technique to real life problems like computer science electronics and applied mathematics, widely in many branches of mathematics.
Continuity and Differentiability	Students learn analysis of multivariable functions, continuity, differentiability integration of the function. This course will serve as foundation for many subsequent courses both in pure and applied mathematics.

Functions of more than one independent variables	Students will develop knowledge in the real analysis of multi-variable functions and some beautiful theorem in analysis such as Rolle's languages canchys mean value Theorem and Macluarins series.
Sequence and infinite series	After successful completion of the course a student will be able to obtain Ratio test, Raabe's canchys Root, Test alternating series, leibnitz's Absolutely convergence and they can apply this Knowledge in higher studies, research field and also in daily life.
Differential Equations, Line & Multiple integrals	Students will learn basic properties of double integrals and its conversion to iterated integrals. After completing this course students will be able to analyze and solve problems related to engineering and science are of the algebraic differential equations and integrals forms.
Series solution total derivative and partial differential equations	Students will be able to classify ordinary and partial differential equations and choose the appropriate method of solution. They will be able to obtain series solution of ordinary differential equation and solve linear and non-linear partial differential equations by using standard methods like clairants form languages linear method and chorpits method.
Numerical Analysis	The students would learn to use basic and commonly used formulae to analyze non-linear system of equations which act as tools of numerical computation. They are able to use numerical quadrature related formulae like Newton's Raphsons method, Trapezoidal Rule Simpson's 1/3 and $3/8^{th}$ Rule and Rungekutta method for finding the solution of initial value problems.
Graph Theory	The students gets familiar with basics of graph theory and its method. This course concepts are widely used in operation research like travelling salesman problem, the shortest spanning tree in a weighted graph and in computer application is the graph algorithms. Such as algorithm to find the connectedness and the adjacency matrices.