

“Department of Engineering Science & Humanities”

Course Outcomes

Course Name: Engineering Mathematics-I
Course Code: 107001 (2015Pattern)

Class: FE

CO1: To Perform matrix operations. Solve the matrix equation using elementary matrix operations. To use systems of linear equations and matrix equations to determine linear dependency or independency. To find the eigen values and corresponding eigenvectors for a linear transformation.

CO2: To understand how quadratic equations lead to complex numbers. To write complex numbers in polar form, compute exponential and integrals powers of complex numbers. To apply De-Moivre’s theorem to determine roots of polynomial and can express hyperbolic, inverse hyperbolic functions.

CO3: To understand the convergence and divergence of infinite series and to evaluate successive differentiation.

CO4: To be able to write expansion of function. To evaluate the limit of a function at a point or at infinity numerically by using L’Hospital’s Rule.

CO5: TO evaluate partial derivatives and can implement to estimate maxima and minima of multivariable function.

CO6: To understand the applications of partial differentiation. To estimate maxima and minima of multivariable function.

“Department of Engineering Science & Humanities”

Course Outcomes

Course Name: Engineering Mathematics-II
Course Code: 107008 (2015Pattern)

Class: FE

CO1: To understand the formation of Differential equation from the given physical problems and to solve first order ordinary differential equation by various methods.

CO2: To be able to apply the knowledge of first order ordinary differential equation in different engineering applications.

CO3: To find the Fourier series representation of a function of one variable and to find half-range Fourier series for even/odd functions.

CO4: To know the fundamental theorem of calculus and be able to use it for evaluating definite integrals and derivatives of integrals with variable limits of integration.

To be able to do curve tracing of functions starting from algebraic formulae in the form of a parameterized curve.

CO5: To solve applied problems by using principles of Sphere, cone and cylinders.

CO6: To set up and evaluate multiple integrals for regions in the plane. To find Area of the region bounded by curves and to find volume, surface area, Mass, C.G and M.I of solid geometric figures.

Subject Teacher

HOD