

Engineering Mathematics [3 – 0 – 1]

Course #:0904201

Prereq.: 0300102

Vectors and the geometry of space: dot product, cross product. Lines and planes in space. Vector functions: derivatives and integrals. Function of two or more variables: partial derivatives, gradient, divergence, Curl. Lagrange's multipliers. Multiple integral. Double integrals in polar coordinates; triple integrals; triple integrals in cylindrical and spherical coordinates; change of variables in multiple integrals;