

**Faculty of Engineering & Technology****Transformations & Complex Analysis****Information :****Course Code :** EMP214**Level :** Undergraduate**Course Hours :** 3.00- Hours**Department :** Mechatronics Engineering**Description :**

Trigonometric series; Fourier series, integrals and transforms; Taylor and Laurent theories; Cauchy integral theorem; Singularity and residue theorem; Convolution and Laplace transform; Inverse Laplace transform methods; Conformal mapping; Fundamentals of z transform; Inverse z-transform methods; Difference equation and solution using z-transform technique; Applications using MATLAB.