

## **Faculty of Computers and Information Technology**

## **Differential Equation**

Information:

Course Code: BMT 121 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Faculty of Computers and Information Technology

## **Description:**

The course provides students with a basic understanding of the fundamental theorem of calculus, integration by trigonometric substitutions, integration by reduction, applications of definite integral: area, volume, arclengh of a curve. polynomial and series. Topics covered in the course are testing for convergence and divergence of a series, ordinary differential equations like equations of first order (separable, homogenous, exact, linear and Bernoulli), orthogonal trajectories, equations reducible to first order, high order linear equations, the variation of parameters, operation method, Euler's equation, and system of linear differential equations.