



**BMS**

**INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

**Avalahalli, Doddaballapura Main Road, Yelahanka, BENGALURU-64**

**DEPARTMENT OF MATHEMATICS**

Open course  
Differential Equations – Theory & Hands on  
2<sup>nd</sup> to 7<sup>th</sup> August, 2018.

The Five days open course on “Differential Equations – Theory & Hands on” organized by the department of Mathematics was held during 2<sup>nd</sup> to 7<sup>th</sup> August, 2018. 12 students belonging to various branches registered for this course.

The course started with the introduction to Python programming by Prof. Sridevi, MCA Department. In this session she explained all the basic concepts of python which were essential for programming. The second day session was handled by Dr. Jojoy Joseph Idicula in which she discussed Introduction to differential equations, separation of variables, homogeneous, linear and Bernoulli’s equations, exact differential equations with suitable examples.

Dr. Karabi Sikdar started third day morning session with the numerical solution of ODE using Euler’s, Modified Euler’s method. Ms. Sreelakshmi T K handled fourth day morning session on the topics Runge-Kutta method, Picard’s method. Ms. Anitha Kiran handled fifth day morning session on solving simultaneous differential equations by Runge-Kutta method.

Dr. Chethan A S and Mr. Kallur V. Vijayakumar conducted hands on in the afternoon sessions of third, fourth and fifth day for the respective numerical methods discussed in the morning session. The hands on sessions were assisted by the students Sahil Verma (VII CSE) & Bibhu Rajan (V CSE).

A quiz was conducted for all the participants in the afternoon and feedback was also collected. Students gave a very good feedback about the course. Certificates were also distributed to the students. At the end of the course, the students will be able to Solve first order differential equations by various analytical & numerical techniques and also programming of numerical methods by using Python.