



**BMS**

**Institute of Technology & Management**

**Department of MCA**

### **FDP Details**

<b>Sl. No</b>	<b>FDP title</b>	<b>Date</b>
<b>1</b>	<b>Mathematical model for Research Problems</b>	<b>June 25<sup>th</sup> to June 29<sup>th</sup> 2018</b>

### **About FDP:**

Mathematical Modelling is the art of translating problems from an application area into tractable mathematical formulations whose theoretical and numerical analysis provide insight, answers, and guidance useful for the originating application. It is indispensable in many applications, and gives precision and direction for problem solution.

Mathematical modelling enables a thorough understanding of the system modelled, prepares the way for better design or control of a system, and allows the efficient use of modern computing capabilities. This course facilitates the learning about mathematical modelling as it is an important step from a theoretical mathematical training to an application-oriented mathematical expertise.

### **OBJECTIVE OF THE WORKSHOP**

Objective of the workshop is to provide guidance to understand naturally observed phenomena and predict them by using mathematical modelling. It gives a recipe of how to simplify the phenomena observed to arrive at a computationally tractable description.

### **EXPECTED OUTCOMES**

Participant will be able:

- Apply several mathematical approaches to model research problems.
- Identify various methods for mathematical modelling.
- Design models to be implemented computationally to enable its evaluation on computers.