



Indian Institute of Management Indore

**INTEGRATED PROGRAMME IN MANAGEMENT (IPM)
TERM: IX**

**TITLE OF THE COURSE: SIMULATION
CREDITS: 04**

COURSE DESCRIPTION

Many real life business and management problems are too complex to be modeled analytically in their entirety and even when they can be modeled, they are either intractable or do not provide a closed form solution. Assumptions required for approximating the problems may be so restrictive that the approximate solution is far from the optimal solution to the problem. Such problems can be analyzed and solved using simulation. This course introduces participants to the basic concepts in Simulation and its applications in business and management context. The participants will also learn how to use Excel, R and SIMIO packages to perform simulation experiments for real world problems in business.

COURSE OBJECTIVES

- 1) To introduce participants to the idea of simulation
- 2) To introduce participants to discrete event simulation and its applications
- 3) To model real world managerial problems using Excel, R and SIMIO