# Indian Institute of Management Indore 

# INTEGRATED PROGRAM IN MANAGEMENT <br> TERM II 

## TITLE OF THE COURSE: PROBABILITY - I

CREDITS: 6

## COURSE DESCRIPTION

This course presents the basic principles of probability theory in two sections. The first part describes combinatorial analysis, classical treatment of probability in finite and countable sample space, conditional probability, Bayes' theorem, discrete random variables and their probability distributions. The second part builds upon axiomatic theory of probability for uncountable sample space, conditioning for revised sample space and Bayes' theorem, continuous random variables and related important distributions.

## COURSE OBJECTIVES:

This course intends to provide an elementary introduction to the theory of probability for students in management science who possess the prerequisite knowledge of elementary calculus. The scope of the course is not restricted to only the mathematics of probability theory, but also, through numerous examples, the many diverse possible applications of this subject.

