

## **Indian Institute of Management Indore**

## Integrated Programme in Management TERM: III

TITLE OF THE COURSE: SAMPLING DISTRIBUTION AND STATISTICAL

INFERENCE CREDITS: 6

## **COURSE DESCRIPTION**

This first part of the course presents the basic principles of random sampling and sampling characteristics including sampling distribution of functions of random variables. The second part of the course develops statistical inference techniques, like estimation of unknown parameters in the distribution of random variables and testing statistical hypotheses regarding unknown parameters.

## **COURSE OBJECTIVES:**

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

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