Statistics for

Business – II

Welcome to Statistics for Business - II Course

Statistics is a versatile discipline that has revolutionized the fields of business, engineering, medicine and pure sciences. This course is Part 2 of a 4-part series on Business Statistics and is ideal for learners who wish to enroll in business programs. The first two parts cover topics in Descriptive Statistics.

Spreadsheets containing real data from diverse areas such as economics, finance and HR drive much of our discussions.

In Part 2, we use the language of probability to examine the underlying distributions of random variables. We model real-life phenomena using known variables such as Binomial, Poisson and Normal. We learn how to simulate data that are distributed according to these variables.

We shall take up datasets that have over a million rows, which makes it difficult to analyze using a spreadsheet. This is a natural setting for R, an advanced statistical programming platform. We incorporate helpful tutorials to get learners acquainted with the platform.

Pre-requisites

Basic Algebra and some Calculus

Learning Outcomes

Upon successfully completing this course, learners will be able:

- To use spreadsheets to analyze larger datasets
- To pose pertinent business questions of datasets and to answer them
- To describe a random variable in probabilistic terms and derive parameters such as mean and variance
- To draw a simple random sample from a population
- To model business phenomena with known random variables such as Binomial, Poisson and Normal
- To simulate variables that follow a prescribed distribution

Time Commitment

7 Weekly Sessions

5-7 Hours Per Week: This includes the time spent in going through the course materials (videos and reading materials), taking up the assessment and participating in the discussion forums.

Course Schedule

Week 0: Recap of Part 1

Week 1: R-Tutorial - I

Week 2: R-Tutorial – II

Week 3: Random Variables

Week 4: Standard Variables – I

Week 5: Standard Variables – II

Week 6: Normal Distribution

Learning Components

We want this to be an engaging learning experience for all of you. Keeping that in mind, we have provided you a mix of videos, quizzes, discussions, interviews and additional resources.

Grading

There is no fixed grading policy. The grading policy depends on the partner institute/organization requirement.

Note: The ungraded assessments are interspersed throughout the course to recall what you have learnt so far. These do not count for final assessments and will not show up on the Progress tab.

Help and Support

Course Moderator: Our course team members will participate actively in the course discussion forum as moderators during the course run. They will make important announcements, answer questions and offer any necessary clarifications. The moderators will typically spend 10-15 hours per week to go through the discussion threads, reply to and edit posts, and communicate important course updates in the forum. Please note that support on Saturday and Sunday will be limited.

Discussion Forum: For course-related questions, use the discussion forums. All registered course participants will have access to a course-specific online discussion forum. Participation in such forums is encouraged because it contributes significantly in the form of peer learning. Discussion forums are commonly used in online courses to provide learners an opportunity to reflect on, discuss and share knowledge gained from the online content. Participation in these forums is strongly encouraged by the course staff.

Technical Issues: For any technical issues, write to tech.support@iimbx.edu.in