



# INTRODUCTION TO PROBABILITY AND STATISTICS

**PROF. G SRINIVASAN**

Department of Management Studies  
IIT Madras

**TYPE OF COURSE** : Rerun | Core | UG/PG

**COURSE DURATION** : 4 weeks (24 Jan' 22 - 18 Feb' 22)

**EXAM DATE** : 27 Mar 2022

**INTENDED AUDIENCE** : Students, young managers/executives

**INDUSTRIES APPLICABLE TO** : Most industries should recognize

**COURSE OUTLINE :**

This course is aimed at being a pre term or a preparatory course for probability and statistics. It is very basic and introduces the students to the understanding of data and measuring associations. It also introduces the concepts of probability and distributions.

**ABOUT INSTRUCTOR :**

Prof. G Srinivasan is a Professor in the Department of Management Studies at IIT Madras. He has more than 25 years of teaching and research experience. His areas of Interest include Operations Research, Supply Chain Management, O.R. Applications. His videos in Operations Research available under NPTEL are popular.

**COURSE PLAN :**

**Week 1:** Different types of data, Tables, charts, histograms, frequency distributions

**Week 2:** Measures of association

**Week 3:** Probability concepts, conditional probability, Bayes theorem

**Week 4:** Probability distributions – random variable, expected value and variance, Discrete distributions – Binomial, Poisson Continuous distributions – Uniform, Normal