



St Mira's College for Girls, Pune
(Autonomous-Affiliated to SPPU)
2019-20

Credit Course
Mathematics & Statistics for Economic Analysis

No of Credits: 02	Course Code:	No. of Hours: 30
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Objectives

- To familiarize the students with a basic understanding of Mathematics and Statistics.
- To equip the students with the ability to apply these mathematical and statistical tools to Economic Analysis.

Unit 1: Statistical Tools for Economic Analysis

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- 1.1 Measures of Central Tendency; Measures of Dispersion.
- 1.2 Standard Deviation.
- 1.3 Uni-variate and Bi-variate frequency distribution and Correlation
- 1.4 Regression Analysis (Linear Regression)
- 1.5 Random Variables- discrete and continuous
- 1.6 Probability and Probability Distribution

Unit 2: Mathematical Tools for Economic Analysis

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- 2.1 Matrix Algebra
- 2.2 Differentiation and its application in Economic Theory
- 2.3 Maxima and Minima – Economic Applications
- 2.4 Integration and its Application in Economics
- 2.5 Time Series

Reference Books:

- 1) Agarwal, B.L. (latest ed): "Basic Statistics", Wiley Eastern Ltd, N. Delhi.
- 2) Ayres, Frank Jr (latest ed): "Calculus", McGraw Hill Book Co, Singapore & London.
- 3) Gupta, S.C. (2009): "Fundamentals of Statistics" Himalaya Publishing House, Mumbai.
- 4) Lipschutz, Seymour (latest ed): "Theory and Problems of Probability", McGraw Hill Book Co, Singapore and London.
- 5) Sampat Mukherjee and Lalima Mukherjee (2013): "Statistics for Economics", New Central Book Agency (P) Ltd, Kolkata.

Board of Studies

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