

MT-455 Econometrics

Review of statistical concepts: random variables, controlled vs uncontrolled experimental data, discrete vs continuous random variables, review of probability concepts. The simple linear regression model: the econometric model, the least squares principle, estimating the econometric model and interpreting the results, the properties of the least squares estimates of an econometric model, inference and prediction in the simple linear regression model. The general linear regression model: the econometric model with more than one independent variable, the least squares principle, estimating the GLRM and interpreting the results, inference and prediction in the GLRM, single and joint hypothesis tests of the parameters of the econometric model. Topics in time series econometrics: stationary time series, spurious regression tests for stationarity, cointegration.

Recommended Books:

1. "Introduction to Econometrics", James H. Stock and Mark W. Watson, Addison-Wesley, 2nd Edition, 2007.
2. "Introductory Econometrics: A Modern Approach", J. M. WOOLDRIDGE, Thomson South-Western, 4th Edition, 2009.