

SYLLABUS :-

Business Econometrics

(2-0-0- 2 Credit) Prerequisites-

None  
Course Objective This subject is designed to teach students how to quantify and test business theories, and making business decision-making. The course covers the basic ideas of linear regression, first with the two-variable regression model and then with the multivariate model, using both quantitative and qualitative variables. Then we deal with the practical consequences of relaxing various assumptions of the classical linear regression model. At the end of the semester, students will be able to set up an econometric model, estimate the model, perform appropriate diagnostic and hypothesis tests, and interpret the results. At the end, students should have an operational knowledge of econometrics. They should be able to gain the followings-

Formulating a business problem, relating to various issues of management  
Building a quantitative model and the corresponding statistical model on business decision making  
Generating data, and estimating the model parameters using a statistical software package  
Performing hypothesis tests, make numerical business forecasts, and analyzing the statistical and business consequences and the implications of the empirical results.  
Course Contents  
Introduction to business econometrics  
Bivariate econometrics modeling  
Multivariate econometrics modelling  
Various issues of econometrics model building  
Multicollinearity problem  
Autocorrelation problem  
Heteroscedasticity problem  
Introduction to dummy modelling  
Panel data regression  
Simultaneous Equations Modelling  
Introduction to time series modeling  
Suggested Text/References  
1. Basic Econometrics, D. N. Gujarati, McGraw Hill  
2. Introduction to Linear Regression Analysis, Douglas C. Montgomery, Elizabeth A. Peck and G. Geoffrey Vining, Wiley Publications  
3. Applied Regression Analysis, Norman R. Draper and Harry Smith, Wiley Publications