Programme: M. A. Economics

Course Code: ECO 126 **Title of the Course:** Introduction to Econometrics

Number of Credits: 4 **Total Contact Hours**:48

Effective from AY: 2018-19

Prerequisites for the course:	Students must have basic knowledge of Statistical and Mathematical methods	
Objective:	To provide students exposure to econometric theory, model building and data analysis	
Content:	. **1. Two-Variable Regression Analysis**: Introduction to Econometric Software: Statistical/ Econometric Software for data analysis. Sample and Population Regression Function. Linearity in variables and coefficients. Ordinary Least Squares (OLS) - Gaussian Classical model. Assumptions and Properties of OLS Estimates; The Co-efficient of determination - R^2, Testing of Hypothesis 2. **Multiple regression analysis**: Problems of Estimation - The three - variable model Interpretation - Partial Regression Coefficients - Multiple co-efficient of determination R^2 (R bar square) Functional forms of regression models; Omitted variables, Specification tests, Ramsey RESET test, Wald, LM test 3. **Autocorrelation**: OLS Estimation in the presence of Autocorrelation; Consequences - Detection - Remedies. 4. **Heteroscedasticity**: OLS Estimation in the presence of Heteroscedasticity – Tests of Heteroscadasticity- Remedies.- Methods of Generalised Least Squares (GLS); 5. **Multi-collinearity**: Estimation in the presence of perfect and imperfect multi-collinearity - practical consequences of multi-collinearity - detection - remedies. 4. **Regression on Dummy Independent Variables** The nature of dummy variables - Regression using quantitative variable and qualitative variable-Application of Dummy Variables' approach	10 10 8 4 10 6
Pedagogy:	lectures/ case analysis/assignments/class room interaction/lab	

References/Readings	**References** • Asteriou Dimitrious,(2006), Applied Econometrics, Palgrave Macmillan, New York • Cameroon Samuel (2005), Econometrics, Mcgraw Hill, New York. • Davidson, J. (2000) Econometric Theory, Blackwell, USA • Goldberger, A.S. (2000) Introductory Econometrics, Harvard University Press, Cambridge. • Greene, W. (2004) Econometric Analysis, Prentice Hall, New York. • Gujarati, D. (2004) Basic Econometrics, McGraw Hill, New Delhi. • Hayashi, F (2000), Econometrics, Princeton University Press, Princeton. • Pattreson, Kerry (2000) An Introduction to Applied Econometric: Time Series Approach, Palgrave Macmillan, New York • Ramanathan Ramu (2002), Introductory Econometrics with applications, Thomson South Western, Singapore • Wooldridge (2006), Introductory Econometrics, Thomson-South Western, Singapore.	
Learning Outcomes	The students will be in a position to develop, estimate and interpret econometric models and to draw the policy implications to help decision makers.	