Course Code : **ECNGE301**
Title of the Course : **Basic Econometrics**
Type of the Course : **Generic Elective Course**
Number of Credits : **4**
Marks : **100 (In-Semester: 40 +End-Semester: 60)**

Unit	Topics	No. of lecture hours
I	Basic Statistical prerequisites Measures of central tendency: mean, median and mode, relation between mean, median and mode, properties of mean; Measures of dispersion: standard deviation and variance; Random variable, Co-Variance & Correlation	16
II	Statistical Inference: Statistic and Parameter, Estimator & Estimate, Characteristic of a good estimator; Testing of hypothesis : Type I and type II errors, one–tailed and two–tailed tests; Level of Significance and Degrees of Freedom. Sampling distribution- χ^2 , t and F distribution;	16
III	Linear Regression Model: Principles of least squares - Two-Variable Linear Regression Model, BLUE – The Gauss–Markov Theorem –Goodness of fit, Dummy variable.	16
IV	Single Equation Problems : Auto-Correlation, Heteroscedasticity, Multicollinearity – Concept Problem, Detection	16
Total		64

Reading list:

1. Gupta, S.P., *Statistical Methods*, Sultan Chand and Sons, New Delhi
2. Gupta, S.C., *Fundamentals of Statistics*, Himalaya Publishing House, Mumbai
3. Gujarati, D.N., *Basic Econometrics*, Tata McGraw-Hill
4. Ramanathan, R., *Statistical Methods in Econometrics*, Academic Press Inc.
5. Wooldridge, J.M., *Introductory Econometrics: A Modern Approach*, SouthWestern Cengage Learning
6. Studenmund, A.H., *Using Econometrics: A Practical Guide*, Pearson
7. Dougherty, C., *Introduction to Econometrics*, Oxford University Press