SUBJECT NO-BM63083, SUBJECT NAME- TIME SERIES ECONOMETRICS
LTP- 2-0-0,CRD- 2

SYLLABUS :-

Time Series Econometrics (2-0-0- 2 Credit)Course Objective- Today, forecasting is key to business and based on analytics. If you are wondering about how to take advantage of inferential analytics, predictive analytics, data science, and big data, this is the course can help you! This course covers topics in regression analysis and time series analysis and other statistical techniques on forecasting. These are time series regression, decomposition methods, and the Box-Jenkins forecasting methodology to name a few. Forecasting is not an armchair activity, nor is it an exercise in mathematical formalism, a one-click-and your done computer project, or an uncritical appeal to past experience. Rather, the modern forecaster must be a creative thinker who is able to use available information wisely, draw on the experience of others, use technical arguments when needed and, finally create a computer-based forecasting system that allows management to plan effectively. Probably no such paragon exists, but we should at least aim for an appreciation of all these skills and the ability to work in a team to achieve success. Virtually every area of business makes use of some type of forecast. This course is intended for students working in the _field of economics, business, marketing, production, operations research, international trade, accounting, etc., who want a non-technical introduction to applied time series econometrics and forecasting.Course Contents-Basics of business econometrics- Linear regression modelling and forecastingNon-linear regression modellingCount data and discrete data modellingTime series modelling- ARIMA, volatility modelling, VAR modelingPanel data modelling- Fixed effect, random effect, GMMStructural equation modellingSimultaneous equation modelling- ILS, 2SLS, 3SLS, IVBusiness forecasting with soft computingSuggested Text and Reference Books-1.Econometric Models and Business Forecasts, R. S. Pindyck and D. L. Rubinfeld, McGraw Hill2.Introductory Econometrics for Finance, C. Brooks, Cambridge University Press3.The Econometrics of Financial Markets, J. Y Campbell, W. L. Andrew, and A. L. Mackinley, Princeton University Press4.Forecasting in Economics and Business, C. W. Granger, Academic Press