

Enquire Teaching Timetable

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Course Outcome

ECON 4120 - Applied Forecasting Methods

Learning Outcome

1. Understand the models used in forecasting economic time series.
2. Learn how to interpret empirical results in this course instead of looking at the numbers in the computer output.
3. Discuss a variety of forecasting issues: forecasting trends, forecasting seasonality, ARIMA processes, combination of forecasts, evaluation of forecasts, and volatility forecasting.
4. Learn well-known statistical software R.

Course Syllabus

1. Introduction: Forecasting problems and forecast objectives; Statistical Reviews: Linear Regression
2. Modeling and forecasting trends and seasonality
3. Characterizing economic cycles
4. Modelling cycles: MA, AR, and ARMA processes
5. Estimation of ARMA model
6. Forecasting from ARMA models
7. Forecasting with multivariate regression models
8. Multiple time-series forecasting models
9. Unit-root and forecasting
10. Cointegration and error correction model
11. Forecasting with system of equations
12. Combination of forecast
13. Evaluation of forecast
14. Volatility measure and forecasting

Assessment Type

	Assessment Type	Current Percent
1	Essays	15
2	Essay test or exam	70
3	Others	15

Feedback for Evaluation

Course and teaching evaluation at end of course
Informal feedback channels throughout the classes (face-to-face)
Departmental Retreat
Programme Review

Required Readings

Diebold, Francis X. (2006), Elements of Forecasting, Cincinnati: South-Western Publishing Co., 4th edition.

Recommended Readings

Nil