

ANL317 Business Forecasting

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

ANL317 Business Forecasting aims to equip students with the knowledge and skills to use quantitative methods to perform business forecast with time series data. At the end of this course, students will be competent in using computer software to perform business forecasting.

Topics:

- Overview of Business Forecasting Techniques
- Dealing with Trends in Time Series
- Time Series Decomposition
- Curve Fitting Methods
- Exponential Smoothing Family of Models
- Basics of ARIMA Models
- Identification of ARIMA Models
- Seasonal ARIMA Models
- Dynamic Regression Models
- Intervention Analysis
- Forecasting in Hierarchy
- Managing the Forecasting Process

Textbooks:

: Business Forecasting, John E. Hanke and Dean Wichern
ISBN-13: 9781292036182

Learning Outcome:

- Describe an overview of business forecasting techniques.
- Examine time series patterns and decompositions.
- Discuss the usefulness and limitation of business forecast.
- Apply various forecasting models such as curve fitting, exponential smoothing, ARIMA, dynamic regression, intervention analysis and hierarchy forecast to solve business forecast problems.
- Evaluate the appropriateness and accuracy of business forecasting techniques.
- Construct models for forecasting using software.
- Apply business forecasting techniques to generate forecast using software.
- Compare and contrast between various forecasting techniques.

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
PRE-COURSE QUIZ	2
TUTOR-MARKED ASSIGNMENT	18
PRE-CLASS QUIZ	2
PARTICIPATION	6
PRE-CLASS QUIZ	2
GROUP BASED ASSIGNMENT	20
Sub-Total	50

Examinable Component	Weightage (%)
Written Exam	50
Sub-Total	50

Weightage Total **100**