

# 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

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

**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:**

<b>Continuous Assessment Component</b>	<b>Weightage (%)</b>
PRE-COURSE QUIZ	2
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
PARTICIPATION	6
GROUP BASED ASSIGNMENT	38
<b>Sub-Total</b>	<b>50</b>

<b>Examinable Component</b>	<b>Weightage (%)</b>
Written Exam	50
<b>Sub-Total</b>	<b>50</b>

**Weightage Total** **100**