ANL317 Business Forecasting

Level: 3
Credit Units: 5 Credit Units
Language: ENGLISH
Presentation Pattern: EVERY JAN

Synopsis:

ANL317 Business Forecasting equips students with the skills and knowledge to use time-series modelling techniques to predict future trends and changes that can help businesses make proactive decisions. At the end of this course, students will be competent in executing the entire forecasting process − from preparing data, identifying specific patterns of a time series, to choosing an appropriate model that produces meaningful and actionable forecasting results.

Topics:

- Installation and introduction of SAS software
- Introduction of time-series forecasting
- Statistical properties of data
- Data exploration
- Data preparation
- Time series decomposition
- Simple moving average
- Exponential smoothing
- Stationarity
- ARMA (Autoregressive moving-average) models
- Modelling non-stationery time series data using ARIMA (Autoregressive integrated moving-average) models
- Seasonal ARIMA models

Learning Outcome:

- Discuss the applications of business forecasting techniques.
- Appraise the strengths and weaknesses of different forecasting techniques.
- Construct models for forecasting using software.
- Apply business forecasting techniques for generate forecasts.
- Prepare time series data for forecasting.
- Evaluate the performance of business forecasting models.

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PARTICIPATION 1	10
	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20

Overall Examinable Components	Written Exam	50
Total		**100**

*The information listed is subject to review and change.