

ANL551 Data Analytics for Decision Makers

Level: 5

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

Data Analytics for Decision Making presents Data Analytics as a key modern approach for decision making in business organisations. It examines the key aspects of Business Analytics based on Cross-Industry Process for Data Mining (CRISP-DM) framework. Students will learn to apply CRISP-DM by going through a series of projects involving data visualisation, association rule mining, clustering, predictive modelling and response modelling. By walking students through such projects, they will gain experience in turning data into important insights that may improve organisational performance.

Topics:

- Introduction to Business Analytics
- CRISP-DM--- An Overview
- Introduction to Data Visualisation
- Process and challenges in a Data Visualisation project
- Association Rule Mining
- Process and challenges in an Association Rule Mining project
- Data Clustering
- Process and challenges in a Data Clustering project
- Predictive Modelling
- Process and challenges in a Predictive Modelling project
- Response Modelling
- Process and challenges in a Response Modelling project

Textbooks:

David Roi Hardoon, Galit Shmueli: Getting Stated with Business Analytics: Insightful Decision-making
Taylor and Francis

ISBN-13: 9781498759670

Learning Outcome:

- Design Analytics Solutions using the CRISP-DM framework
- Appraise the suitability of analytics techniques in different contexts
- Evaluate performance of analytics models
- Assess the quality of data for analytics
- Prepare data for mining and analysis
- Construct an analytics solution using application software

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	10
	GROUP BASED ASSIGNMENT 1	30
	PARTICIPATION 1	10
Overall Examinable Components	ECA	50
Total		100

*The information listed is subject to review and change.