

# ANL303 Fundamentals of Data Mining

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY SEMESTER

## Synopsis:

Fundamentals of Data Mining (ANL303) introduces students to the process and applications of data mining. Students will learn to appraise possible data mining solutions to address different types of business problems. Apart from learning to explore and prepare data for mining, they will be equipped with the basic skills and knowledge in constructing, interpreting, and evaluating data mining results or models. They will also be exposed to applying data analytics using a suite of tools including cloud services.

## Topics:

- Introduction to data mining
- Types of data mining
- Applications of data mining
- Cross-industry standard process for data mining
- General data quality issues and treatments
- Preparing data for different types of mining tasks
- Introduction to association rule mining
- Introduction to cluster analysis
- Introduction to predictive modelling
- Model evaluation and result interpretation
- Introduction to clouds analytics
- Applying clouds analytics

## Learning Outcome:

- Discuss various aspects of formulating data analytics solutions
- Appraise the application of data analytics in a given context
- Recommend appropriate analytics solutions in a given context
- Construct analytics models/results as part of solutions to address business problems
- Evaluate the performance of analytics models
- Analyse the results or outputs of analytics models

## Assessment Strategies (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-COURSE QUIZ 1	2
	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2

Overall Continuous Assessment	PARTICIPATION 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	Written Exam	50
<b>Total</b>		<b>100</b>

**Assessment Strategies (Online Class):**

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-COURSE QUIZ 1	2
	DISCUSSION BOARD 1	10
	GROUP BASED ASSIGNMENT 1	10
	PARTICIPATION 1	6
	TUTOR-MARKED ASSIGNMENT 1	18
Overall Examinable Components	Written Exam	50
<b>Total</b>		<b>100</b>