



## SIMATS ENGINEERING

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**Course Code:** DSA-0613

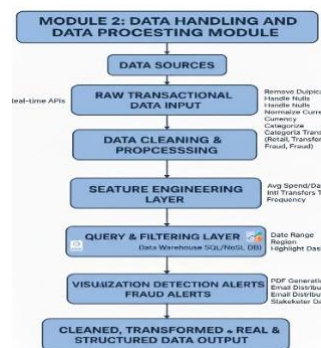
**Slot:** A

**Course Name:** Data Handling and Visualization for Data Analytics

**Course Faculty:** Dr.Kumaragurubaran T & Dr.Senthilvadivu S

### Project Title: Digital Banking Transaction Analysis Using Data Handling and Visualization

#### MODULE 3:



**Module 2: Data Handling and Processing**

This module takes the raw data from Module 1 and performs cleaning, transformation, and feature engineering.

**Before Processing**

Transaction ID	Date	Amount	Transaction Type	Category	Location
1	2023-01-01 10:00:00	100.00	Debit	ATM	Chennai
2	2023-01-01 10:05:00	50.00	Debit	ATM	Chennai
3	2023-01-01 10:10:00	200.00	Debit	ATM	Chennai
4	2023-01-01 10:15:00	150.00	Debit	ATM	Chennai
5	2023-01-01 10:20:00	100.00	Debit	ATM	Chennai

**After Processing**

Transaction ID	Date	Amount	Transaction Type	Category	Location	Transaction Month	Transaction Day	Week of Category
1	2023-01-01 10:00:00	100.00	Debit	ATM	Chennai	2023-01	01	Standard Week
2	2023-01-01 10:05:00	50.00	Debit	ATM	Chennai	2023-01	01	Standard Week
3	2023-01-01 10:10:00	200.00	Debit	ATM	Chennai	2023-01	01	Standard Week
4	2023-01-01 10:15:00	150.00	Debit	ATM	Chennai	2023-01	01	Standard Week
5	2023-01-01 10:20:00	100.00	Debit	ATM	Chennai	2023-01	01	Standard Week

### Digital Banking Transaction Analysis Using Data Handling and Visualization

#### Project Description:

- Focuses on analyzing digital banking transaction data to study customer behavior and transaction trends.
- Apply data handling techniques such as data cleaning, transformation, and aggregation to ensure accurate and reliable analysis from multiple data sources.
- Apply visualization tools to present transaction insights clearly.
- Assists in better decision-making and operational improvement.

#### MODULE 3: Data Visualization and Reporting

- Defines data handling concepts and data processing stages.
- Represents data using structured and semi-structured formats.
- Applies data cleaning, transformation, and aggregation techniques.
- Eliminates missing, duplicate, and inconsistent data early.

**Student Signature**

**Guide Signature**