

EE467 - Group Project 3: Data Acquisition

Objective

- Collect the data.
- Perform analysis on the collected data.

Experimental Setup Options and Data to be Collected

1. RC Modelling of Room

- Features to collect: Indoor temperature, Outdoor temperature, AC energy consumption, Time stamps.
- Expected Outcome: RC Modelling of room

2. Thermal Comfort Experiment

- Features to collect: Indoor temperature, Humidity, AC setpoints, User comfort feedback.
- Expected Outcome: Thermal comfort analysis

3. Energy Consumption Data Collection

- Features to collect: Energy consumption data from smart energy meter.
- Expected Outcome: Detailed energy consumption analysis

4. Room Ventilation Experiment

- Features to collect: CO₂ concentration, Indoor temperature, Indoor humidity, Occupancy/ventilation event times.
- Expected Outcome: Comfort and ventilation analysis

Additional Notes

- You may propose an alternate data collection and analysis topic, subject to prior approval.
- A maximum of four groups will be allotted to any single project.

Submission

1. **Data Collected** – The raw data gathered for your project (in Excel/CSV format)
2. **Data Analysis** – A detailed report or notebook (Word/PDF/Jupyter) showing the analysis performed on the collected data, including graphs, insights, and conclusions.