**Date Released**: Monday, February 26, 2024

**Due Date**: Friday, March 1, 2024

## **Term Project**

## **List of Projects**

**Group 1**: Design & build a portable RJ-45 Cable tester.

**Group 2**: Design & build a portal device to measure the moisture content/level in a soil.

**Group 3**: Design & build a weather monitoring station & logging system.

**Group 4:** Design & build a sun tracking solar panel.

**Group 5**: Design & build a rain sensing automatic car wiper.

**Group 6**: Design & build a portable energy (power) monitoring device for a household.

**Group 7**: Design & build a portable Christmas tree.

**Group 8**: Design & build an automated dimming street light device.

**Group 9**: Design & build a wireless doorbell system.

**Group 10**: Design & build a portable alcohol detection system.

**Group 11**: Design & build a universal TV remote controller.

**Group 12**: Design & build an emergency GPS tracking device.

**Group 13**: Design & build a Police Siren device.

**Group 14**: Design & build a heart rate monitoring device.

**Group 15**: Design & build a portable bluetooth speaker.

## Instructions:

- 1. You are required to submit a prototype together with a 3-page report on how the system was designed and built.
- 2. Record a video that demonstrates how your prototype works. Each group member is required to appear in the video. A web portal will be setup for submission of the project report together with the demo video.