

Content Required for Deliverable 1: Minimum 2 maximum 3 project proposals: each should include:

- Description of the project and key functionalities.
- Justification on how the proposed system aligns with the theme.
- Preliminary design (block diagrams, flowcharts, etc.).
- Justification on how the proposed system aligns with requirements and constraints.
- Estimated prototyping (parts) and labor cost.
- Prospective market and impact.

Marking Guide:

0-3: Very Poor - Most of the criteria is not met.

4-6: Poor - While most criteria are met, it is not of a satisfactory standard.

7-9: Average- All criteria are met to an acceptable level.

10-12: Good - All criteria are met and the presentation is of a good standard.

13- 15: Very Good - All criteria are met and the presentation is of a very good standard.

Themes:

The development of products interfaced to the Internet that make use of sensors, actuators, display and programmable devices, i.e., Internet of Things (IoT) and their applications.

In transport and traffic management

In health (aged care – dementia etc.)

In manufacturing industry (IR 4.0)

In humanitarian engineering (low-cost engineering solutions for those in need)

Parking detection and resources sharing systems using electrical systems

Electrical devices that enhance student learning in years K-12

Reduce, Reuse, recycle: Promote a 'green' behavior by minimizing the impact of mankind on our planet (e.g. waste, pollution, energy, natural resources. The theme aims to minimum electrical power usage and maximum functionality.

Similar IOT applications above