



**CANSAT 2025**  
**Initial Design Concepts (IDC)**  
**Version 1.1**

**TEAM NAME :** .....

**SCHOOL :** .....

This is meant to be a summary of an initial design meetings. The document should be 5 to 10 pages long and can include hand written notes and hand drawn figures. The IDC is not meant to be in depth, rather it is first thoughts on what will be the issues in making a CANSAT. The final CANSAT does not have to be the same as the IDC.

Please submit the PDC as a pdf document within four weeks of the entry form.

The following points should be considered in the IDC.

- 1) What are your mission objectives?
- 2) Who is in your team and what roles do they have? These may include, but are not limited to Team Leader, Recovery, Construction, Electronics, Programming and Telemetry. More than one student can be allocated to each role.
- 3) What components will be used in the CANSAT? Will you be using an Arduino, a Raspberry Pi or the University of Waikato Flight Computer? And what hardware modules will be used? What sensors will be used?
- 4) What is the initial physical design? Remember, this has to fit into a 60mm tube. Will it be 3D printed or constructed using other methods?
- 5) What are the various phases of flight and what operations will your CANSAT perform in each phase? When will you be deploying parachutes, etc? Flowcharts may be useful here.
- 6) What is your power supply?
- 7) What is the weight budget and final weight of the CANSAT?
- 8) How will your telemetry system work and what will your ground station consist of.?
- 9) What is your initial budget?
- 10) A provisional timeline for the project CANSAT IDC