Learning Objectives – Getting Started

After completing 'Getting Started', students will be able to…

Introduction Presentation

- Understand that a satellite is any object in Earth's orbit.
- Recall examples of well-known satellites (ISS, Sputnik, etc.)
- Recognise that there are thousands of objects currently in orbit.
- Describe a number of different purposes and uses of satellites.
- Compare and contrast the features of a CubeSat with more 'traditional' satellite models.
- Explain the advantages and disadvantages of CubeSat use.
- Identify and describe the different components of a CubeSat.

CubeSat Assembly

- Appropriately prepare their workspace for satellite assembly.
- Sort and classify satellite parts from the assembly kit.
- Interpret and follow technical instructions.
- Work as a team to ensure assembly is carried out correctly and efficiently.

CubeSat Basic Use

- Describe the mechanism by which satellites send, receive and interpret signals.
- Identify and interpret telemetry readings from the satellite.
- Make and test predictions about the behaviour of readings under a controlled change (e.g. rotation, temperature change, etc).
- Compare baseline telemetry readings with known values.
- Suggest reasons why error may be present in the telemetry readings.
- Propose adjustments, solutions or changes that could minimise sources of error.

Careers Slideshow

- Understand that the space industry in Australia is widespread and rapidly growing.
- Recall a diverse range of careers in the space industry.
- Describe the role of many jobs in the space industry.
- Understand the various personal and educational pathways that lead to space careers.