

VCE Systems Engineering Units 1 & 2

OVERVIEW

The Systems Engineering course is designed to promote innovative systems thinking and problem solving with a project management approach.

The focus is on mechanical and electrotechnology systems and students are encouraged to develop alternative designs, learn through trial and error, and consider design trades offs.

The study can be applied to a diverse range of engineering fields, such as manufacturing, automation, robotics, mechatronics, and more.

AREAS OF STUDY

Unit 1

Unit 1 concentrates on mechanical systems

Unit 2

Unit 2 focuses on electrotechnology systems.

Skills:

- Use of technology to solve problems
- Analytical, research and problem solving
- Investigation and modelling

At NCAT small class sizes allow for more student assistance from the teacher. This facilitates a high degree of teacher/student interaction and further enhances learning.

While not a prerequisites for Systems Engineering Unit 3 & 4 it is highly recommended for students considering unit 3 & 4 Systems Engineering, as the primary focus for unit 3 & 4 is Electromechanical systems and encompasses the knowledge and skills taught during unit 1 & 2.

ASSESSMENT

Unit 1 and 2 semester exams.

Students are also assessed on assignments and summary book notes.

SUBJECT PREREQUISITES

A satisfactory pass in year 10 Maths.