

Junior Cycle **Engineering** at Coola PPS

Engineering encourages students to take an active, collaborative and goal orientated approach to problem solving. Engineering takes a reflective, systematic approach to design and design modification for the purpose of manufacturing an improved solution.

Manufacturing tasks place emphasis on precision and high-quality finish.

Engineering fosters an engineering mind-set in all students.



Room 4 - Engineering Room

The study of **Engineering** at junior cycle aims to:

- create a high level of awareness of engineering processes
- develop the technical literacy of the student
- develop the skills necessary to manipulate material to engineer a product
- explore engineering developments
- appreciate the skills needed to acquire a high standard of finish of a product

Learning Experiences

Students will be active participants in their learning. The focus of junior cycle Engineering is goal oriented problem solving for the manufacture of products, with emphasis on efficiency, accuracy, precision and a high-quality finish. This project based approach to junior cycle Engineering requires students to develop a knowledge of materials and processes.

A Student's Learning Journey

1st Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment



1st Year Chinese Puzzle

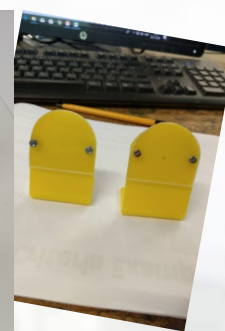
2nd Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment

Classroom-Based Assessment 1
Engineering in Action

Teachers engage in a Subject learning and Assessment Review meeting



1st Year Photo holder

3rd Year

Students develop knowledge, understanding, values and skills through engagement with learning outcomes

Learning supported by formative assessment

Classroom-Based Assessment 2
Research and Development

Teachers engage in a Subject Learning and Assessment Review meeting

SEC Examination
Project – 70%
Written Examination – 30%



1st Year Christmas Trees and Clocks

Junior Cycle Profile of Achievement (JCPA)

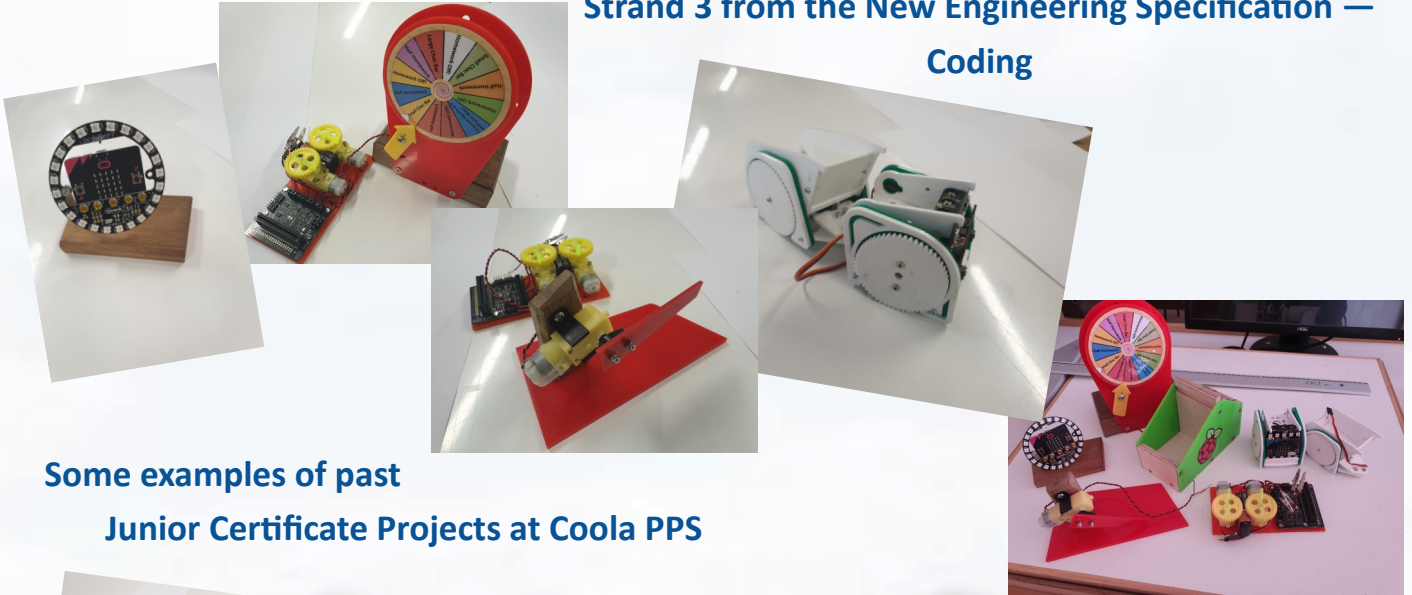
Project and Written Examination

A project is completed after the second CBA component in third year. The brief for the project is set and marked by the State Examinations Commission (SEC). The project accounts for 70% of the final SEC grade.

A final written examination takes place at the end of third year. It is set and marked by the State Examinations Commission (SEC). The final examination accounts for 30% of the final SEC grade. Engineering is offered at common level.

Click [here](#) for more information on the 2022 Junior Cycle Engineering Project.

Strand 3 from the New Engineering Specification — Coding



Some examples of past Junior Certificate Projects at Coola PPS



Student Achievement

Here at Coola PPS our students excel in the Practical Subjects. Students choosing Practical Subjects in this school have consistently performed higher than the national average receiving an honours grade of A, B or C at higher Level in the traditional Junior Certificate examinations. We are confident this will continue with the introduction of the new Junior Cycle Technology subjects and look forward to meeting the challenge.