

## Computer Science

- For the Project which is to be submitted March 2024.
- ALT 3 & 4

### APPLIED LEARNING TASK 4: EMBEDDED SYSTEMS

The design and application of computer hardware and software are a central part of computer science. In this applied learning task, students will implement a microprocessor system that uses sensors and controls digital inputs and outputs as part of an embedded system. By building the component parts of a computer system, students will deepen their understanding of how computers work and how they can be embedded in our everyday environments.

Students learn about:	Students should be able to:
Embedded systems	3.11 use and control digital inputs and outputs within an embedded system
Computing inputs and outputs	3.12 measure and store data returned from an analogue input
Computer systems	3.13 develop a program that utilises digital and analogue inputs
Design process	3.14 design automated applications using embedded systems