# STEM – Term 2 Theme: Coding and Robotics

This term in STEM, students across all year levels will be diving into the exciting world of coding and robotics. Each year level will engage in hands-on, age-appropriate learning experiences designed to build problem-solving, sequencing, and computational thinking skills.

### Prep

Prep students will be introduced to the early stages of coding using LEGO. They will explore cause and effect through the use of colour-coded blocks, helping them understand basic programming concepts in a fun and engaging way.

# Year 1

Year 1 students will explore the basics of programming using Bee-Bots and Blue-Bots. These simple, programmable robots allow students to practise coding skills while developing directional language and sequencing.

### Year 2

Year 2 students will continue to build on their coding knowledge using programmable robots. They will focus on developing foundational programming skills, including problem-solving, sequencing, and logical thinking.

### Year 3

Year 3 students will be learning the fundamentals of coding using LEGO. By arranging colour-coded icons to represent different commands, students will create simple code sequences and bring their LEGO builds to life.

# Year 4

Year 4 students will expand on their coding knowledge using LEGO. They will continue creating more complex code sequences using colour-coded blocks and will deepen their understanding of command-based programming.

#### Year 5

Year 5 students will explore coding and robotics using LEGO SPIKE Prime kits. They will build and program robots, create sequences of commands, develop algorithms, and troubleshoot their designs using block-based coding.

# Year 6

Year 6, students will be expanding their knowledge of coding and robotics using the LEGO SPIKE Prime kits. Through hands-on learning, students will build and program their own robots. They will learn to create sequences of commands, develop algorithms, and troubleshoot their designs, gaining practical experience with block-based coding and text-based programming.

