LEGO® Robotics Primary

Workshop	LEGO® Robotics Primary
Recommended Year Groups	3-6
Subject	Computing
Course Description	Using our very own LEGO® Education SPIKE™ Essentials kits, students will build and program their own interactive model. Covering key Computing topics such as coding, repetition in programs, debugging, inputs & outputs and algorithms.
Duration	45 minutes
Equipment	LEGO® Education SPIKE™ Essentials kits LEGO® Education SPIKE™ App iPads
Capacity	30 students
Lesson Aims and Objectives	✓ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems ✓ Use sequence, selection and repetition in programs; work with variables and various forms of input and output

Workshop	LEGO® Robotics Secondary
Recommended Year Groups	7-9
Subject	Computing and STEM
Course Description	For those Students who have a good understanding of programming comes the next challenge. Students will build, code, and debug their own robots using our very own SPIKE™ Prime robotics sets! Finding creative solutions as they develop their problem-solving skills, this experience will enable students to learn more about algorithms, sequences, inputs & outputs.
Duration	45 minutes
Equipment	LEGO® SPIKE™ Prime Sets LEGO® Education SPIKE™ App iPads
Capacity	16 students
Lesson Aims and Objectives	✓ Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems ✓ Understand the hardware and software components that make up computer systems and how they communicate with one another ✓ Understand how instructions are stored and executed within a computer system ✓ Evaluate and apply information technology, including new or unfamiliar technologies analytically, to solve problems ✓ Aid the creation of responsible, confident, and creative users of ICT ✓ Apply computing to embed intelligence in products that respond to inputs and control outputs using programmable components