

Robotics Curriculum Intent

The Robotics curriculum is designed to provide students with a hands-on learning experience in small groups, focusing on **key processes in engineering and programming**.

By combining theoretical knowledge with practical application, students will gain a comprehensive understanding of building fully functional robots.

This course not only enhances technical skills but also fosters the development of essential skills through teamwork. Students will have the opportunity to assume various roles within their groups, such as team leaders, organisers, builders, and quality assurance, to cultivate collaborative abilities. Additionally, students will explore fundamental concepts like centre of mass, friction, gravity, and gear ratios to deepen their understanding of successful robot design and operation.

At the end of the course students will **know more** about the roles of engineering and programming and where they fit into potential careers in the future.

They will be able to **do more** from the practical building and programming of the robot which will lead them to **be more** in their future!

Key end points for Year 7

- Fully working robotic base.
- Fully working robot with arm and claw.
- Knowledge of the different types of engineering and the design/build process