

Ravens Wood School

Sixth Form Academy Provision Map



Academy Name: STEM

Overarching Aim:		
Why join this Academy?	<p>The STEM Academy aims to take students with an interest in Science, Technology, Engineering and Maths beyond the normal specification of their subjects and to be involved in projects across the disciplines.</p> <p>These projects will cross the boundaries between the subjects and serve as the fertile ground from which future technical workers and industry leaders will be nurtured. STEM academy aims to provide the intellectual foundations and tools for future scientists, inventors and engineers.</p>	
Themes/ Practical Skills/ Techniques and Key Skills	The sophistication and application of skills will become more advanced as students' progress through the Academy.	
	Theme/Skill/Technique	How will this be developed?
	Coding	Developed across a number of projects and challenges, this will include online projects and coding of hardware devices such as Raspberry Pi Picos and external sensors
	Design	Using both manual design processes and computer aided design, students will get the chance to design to a brief and then put their designs into practice
	Engineering	Going from designs to test prototypes and final models, students will use a range of techniques across multiple projects
	Science	Developing novel scientific investigations and putting them into practice as part of the CanSet challenge and other projects
Key Dates of Events/ Competitions entered	Maths	Developing Maths skills across all the other disciplines to ensure designs and projects are able to meet project briefs
	Date	Event/Competition
	November	BEBRAS Computing Challenge – introduces computational thinking to students
	October – June	European CanSat Competition – a chance for students to design, build and launch a satellite packaged into the size of a soft drink can
	February	F1 in Schools Challenge – designing, building and testing a Formula 1 car of the future