

## Year 9 – Computing

### National Curriculum ‘Plus’

**Subject: Computing**

**Project Title:** iDEA Bronze Award

<b>Key Objectives</b>	<b>Key Knowledge Covered:</b>	<ul style="list-style-type: none"><li>✓ Random Coding badge.</li><li>✓ Make a Game badge.</li><li>✓ Make a Game badge, Snowflake and sorting hat badges.</li><li>✓ What is the Cloud? Badge, Internet of Things badge, Internet and Web badge.</li><li>✓ Image Specialist badge.</li><li>✓ Digital research, Big Data, Projects and Graphic Design badges.</li><li>✓ Image Specialist, Colours, Animation and Making websites badges.</li><li>✓ E-safety and Online Etiquette, Digital Ethics, Safe Online, Cyber Spies and Cyber Security badges.</li></ul>
	<b>Key Skills Covered:</b>	<ul style="list-style-type: none"><li>✓ Develop skills of designing, using and evaluating computational abstractions.</li><li>✓ Developing computational thinking skills.</li><li>✓ Using programming languages to solve a variety of computational problems.</li><li>✓ Making appropriate use of data structures.</li><li>✓ Using Boolean logic in circuits and programmes.</li><li>✓ Using hardware and software components to make up a computer system.</li><li>✓ Undertaking creative projects and using software programs to create a product.</li><li>✓ Developing skills to ensure using technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy.</li></ul>
<b>How is this project designed so it covers and goes beyond the National Curriculum?</b>	<p>In Year 9 pupils complete badges towards the iDEA bronze award. These badges are completed online alongside class activities that supplement and reinforce the pupils learning to strengthen their understanding. The badges cover a range of topics including programming, staying safe online, game design, how the internet works and how digital artefacts are produced. This builds on the content in year 7 and 8 where pupils learn about Python programming (Year 7) and how computers work and communicate (Year 8).</p> <p>This gives pupils exposure to a range of ICT and Computer Science curriculum areas to prepare them for KS4 and to help them make an informed choice when choosing their key stage 4 options. These badges prepare pupils towards both the GCSE Computer Science qualification and the OCR National award in Creative iMedia. In addition, pupils complete badges that explore beyond the Computing curriculum into Business studies, linking to the BTEC Tech award in Enterprise that is also offered at KS4.</p>	