




# YEAR 11 GCSE COMPUTER SCIENCE SPRING TERM 2 – PAPER 1

‘An ambitious curriculum that meets the needs of all’

## Medium Term Planning – Impact of Digital Technology

Curriculum Intent	Pupils will be taught the following National Curriculum guidelines this term:
Skills/Assessment Objective Links	<p><b>At the end of this Unit all students should be able to:</b></p> <ul style="list-style-type: none"> <li>• At the end of this Learning Aim all students should be able to:</li> <li>• List ethical issues, cultural issues and environmental issues in relation to a given scenario</li> <li>• List items of legislation that relate to digital technology</li> </ul> <p><b>Most students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Discuss the impacts of digital technology on the wider society including ethical issues, cultural issues and environmental issues</li> <li>• Discuss the impact of manufacture, disposal, upgrading and replacing digital technology</li> <li>• Discuss the impact of e-waste</li> <li>• Discuss the impact of digital technology regarding legal issues and privacy issues</li> <li>• Describe legislation relevant to Computer Science including               <ul style="list-style-type: none"> <li>o The Data Protection Act 2018</li> <li>o Computer Misuse Act 1990</li> <li>o Copyright Designs and Patents Act 1988</li> </ul> </li> <li>• Describe the features of open source and proprietary software licences</li> </ul> <p><b>Some students will be able to:</b></p> <ul style="list-style-type: none"> <li>• List the clauses of the Data Protection Act and Computer Misuse Act and give examples of situations in which they are relevant</li> <li>• Evaluate the impact of and issues related to the use of computers in society</li> </ul>
Numeracy	Unit of memory
Literacy	<p><b>Vocabulary Tier 3:</b> Ethical, cultural, environmental, legislation, manufacture, disposal, e-waste, data protection, computer misuse, copyright, copyright designs and patents act, open source, proprietary, software license</p> <p><b>Vocabulary Tier 2:</b> Privacy, upgrade, protection, legal, replace</p> <p><b>Reading:</b> Worksheets, presentations, answer sheets, exam questions, mark scheme, further reading for homework</p> <p><b>Writing:</b> Answer on the worksheet via word</p> <p><b>Oracy:</b> listening and using tier 3 words</p>
Becoming future ready	<p><b>Careers/Employability:</b></p> <ul style="list-style-type: none"> <li>▪ Software Architect.</li> <li>▪ Data Scientist.</li> <li>▪ Machine Learning Engineer.</li> <li>▪ Blockchain Developer</li> <li>▪ Cybersecurity Engineer.</li> <li>▪ Cloud Solutions Architect.</li> <li>▪ AI Research Scientist.</li> <li>▪ Full-Stack Developer.</li> </ul>
Adaptation	Throughout this topic, quality first teaching will provide differentiation:
QFT/SEND Provision	<p><b>By product:</b> Learners are asked to present outcomes in a different way via pieces of writing, targeted questioning, models and drawings and speaking.</p> <p><b>By resource:</b> Worksheets are well presented and accessible. Instructions are clearly outlined and separate from the information so that pupils know where to begin and end. Handouts are differentiated by outcome. Resources used will appeal to the range of preferred learning styles of pupils e.g. visual, auditory or kinesthetic learners. Scaffolding of tasks – word frames.</p> <p><b>By Intervention:</b> By providing different levels of supervision and support</p> <p><b>By Progressive Questioning:</b> Exploring pupils’ understanding through interactive dialogue using Blooms Taxonomy.</p>

	<p><b>By Grouping:</b> According to prior attainment, gender, social preference, preferred learning style</p> <p><b>By Task:</b> Pupils identify targets which are meaningful to them via feedback sheets</p> <p><b>By Offering Optional Activities:</b> In class or as homework, to extend learning.</p> <p>This QFT/SEND provision will be explicit within the lesson by lesson schemes of work.</p>	
<b>Implementation Curriculum Delivery</b>	To be able to:	
<b>Learning Outcomes (Knowledge)</b>	<p><b>Topic 1 Ethical and cultural issues</b> Discuss the impacts of digital technology on the wider society including:</p> <ul style="list-style-type: none"> <li>o Ethical issues</li> <li>o Cultural issues</li> </ul> <p><b>Topic 2 Environmental issues</b> Discuss the impacts of digital technology on the environment including:</p> <ul style="list-style-type: none"> <li>o The impact of manufacture and disposal</li> <li>o The impact of upgrading or replacing</li> <li>o The impact of e-waste</li> </ul> <p><b>Topic 3 Legislation and privacy</b> Discuss the impacts of digital technology on wider society including:</p> <ul style="list-style-type: none"> <li>o Legal issues</li> <li>o Privacy issues</li> </ul> <p>Describe legislation relevant to Computer Science:</p> <ul style="list-style-type: none"> <li>o The Data Protection Act 2018</li> <li>o Computer Misuse Act 1990</li> <li>o Copyright Designs and Patents Act 1988</li> </ul> <p>Software licences including open source and proprietary</p> <p>End of unit assessment</p>	
<b>Current learning to be developed in the future within:</b>		
<b>Assessment</b>	See assessment maps for formative and summative assessment opportunities.	
<b>Impact</b>	<p>Review assessment results and target pupils that require further support via:-</p> <ul style="list-style-type: none"> <li>• Learning conversation</li> <li>• Changing seating plan</li> <li>• Plan lessons to address areas of concern in assessment</li> <li>• Targeted homework based on low performance areas identified in the assessment and marked pieces</li> <li>• Stretch and challenge high ability pupils by identifying ambitious next steps to expand knowledge</li> </ul> <p>Create a feedback sheet for each student</p> <p>Each student identifies areas of Green, Amber and Red using Mark Assessment on their feedback sheet</p> <p>Complete NOW task on areas identified as Amber and Red</p>	