

## Key Stage 5 Curriculum Map 2021-22

### Term 2

Subject: Computer Science	Year: 12		
Focus/Topic	UAE Links	HPL Links	Home Learning/ Recommended Reading
<ul style="list-style-type: none"> <li>Single and multi-dimensional arrays</li> <li>External data</li> <li>Fields records and files</li> <li>User Defined Data Types</li> </ul>	Programming scenarios linked to the UAE Accountability and brotherhood	<b>HARD WORKING-Resilience</b> <b>LINKING- Connection finding</b>	<b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources online
<ul style="list-style-type: none"> <li>Validation</li> <li>Sorting and searching</li> <li>The roles of variables</li> <li>Fundamentals of Structured programming approaches</li> </ul>	Programming scenarios linked to the UAE Accountability and brotherhood	<b>CREATING- Intellectual playfulness</b>	<b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources online
<ul style="list-style-type: none"> <li>Logic bit and set operators</li> <li><b>Assessment</b></li> </ul>	Programming scenarios linked to the UAE Accountability and brotherhood	<b>META-THINKING-Meta cognition</b>	<b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources online
<ul style="list-style-type: none"> <li>Computational thinking</li> <li>Stages of problem solving</li> <li>Algorithm design</li> </ul>	Accountability	<b>HARD WORKING-Resilience</b>	<b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources online
Mocks			
Mocks			
Half Term			
<ul style="list-style-type: none"> <li>Abstraction and automation</li> <li>Finite State Machines</li> <li><b>Assessment</b></li> </ul>	Automation within Dubai UAE links – Creative intelligence (The UAE government has used AI to limit the movement of Dubai residents by using a program called 'Oyoon'. This program monitors the permits of residents who leave their homes by using facial, voice, and license plate recognition. UAE want to be the leader of AI by 2031.	<b>Linking – Big picture thinking</b> <b>ANALYSING-Precision</b> <b>HARD WORKING-Perseverance</b>	<b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources online

<ul style="list-style-type: none"> <li>• Hardware and software</li> <li>• Classification of programming languages and translation</li> <li>• Assembly Language</li> </ul>	<p>Accountability – Islamic link one is accountable for his own actions. UAE links launched an initiative to foster the development of coding in the country</p>	<p><b>Linking – Big picture thinking</b> <b>ANALYSING-Precision</b> <b>HARD WORKING-Resilience</b></p>	<p><b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources on MS Teams</p>
<ul style="list-style-type: none"> <li>• <b>Assessment</b></li> <li>• Logic Gates</li> <li>• Boolean Algebra</li> <li>• Simplifying Boolean Expressions including De Morgan’s Law</li> </ul>	<p>Accountability – Islamic value of been honourable and marking your work with precision UAE link logical theories</p>	<p><b>Linking – Big picture thinking</b> <b>ANALYSING-Precision</b> <b>HARD WORKING-Perseverance</b></p>	<p><b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources on MS Teams</p>
<ul style="list-style-type: none"> <li>• Simplifying Boolean Expressions including De Morgan’s Law</li> </ul>	<p>Accountability – Islamic value of characteristic of simplicity and modesty. Islam teaching of Prophet Muhammed (PBUH) lived a life of humility and modesty.</p>	<p><b>ANALYSING-Precision</b> <b>HARD WORKING-Perseverance</b></p>	<p><b>Reading:</b> Alevel textbook <b>Home learning:</b> as per lesson resources on MS Teams</p>
<p><b>Assessment, feedback and improvements</b></p>			
<p style="text-align: center;"><b>Spring Break</b></p>			