Key Stage 5 Curriculum Map 2020-21

Term 1

Subject: Computer Science	Year: 12	
Focus/Topic	**UAE Links**	**Home Learning / Reading**
Induction week		
• Baseline assessments, curriculum orientation and expectations		
• Fundamentals of Programming including Data Types, Programming concepts and Arithmetic operations in a programming language		**Reading**: Alevel textbook **Home learning**: as per lesson resources on MS Teams

• Programming concepts including;
   o Selection
   o Boolean operators
   o Iteration
   o built in function
		Reading: Alevel textbook
		 Home learning: as per lesson resources on MS Teams

• Programming concepts including procedures and function, parameters, trace tables and exception handling • Mini assessment		**Reading**: Alevel textbook **Home learning**: as per lesson resources on MS Teams
• Single and multi-dimensional arrays • External data • Fields records and files • User Defined Data Types		**Reading**: Alevel textbook **Home learning**: as per lesson resources on MS Teams
• Validation • Sorting and searching • The roles of variables • Fundamentals of Structured programming approaches		**Reading**: Alevel textbook **Home learning**: as per lesson resources on MS Teams
Mid Term Break		
• Logic bit and set operators • Assessment		**Reading**: Alevel textbook

		Home learning: as per lesson resources on MS Teams
• Number Systems • Number Bases		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
• Binary number system including floating points, two complement and fractions • ASCII & Unicode		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
• Error Checking • Bitmapped and Vector Graphics • Analogue and Digital audio • Assessment		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
• Sound Compression & Nyquist theory • Sound Synthesis • Assessment		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
• Encryption • Hardware and software		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
• Mock preparations		Reading: Alevel textbook Home learning: as per lesson resources on MS Teams
Winter Break		