

Key Concepts: Information Technology					
	7	8	9	10	11
Component 1	Impact of technology	Computing Systems	Cyber Security	Component 1, Exploring User Interface Design Principles	Component 1, Exploring User Interface Design Principles
Key concepts:	Identifying how to use online collaboration tools respectfully. An introduction to the computing lab.	Exploring the fundamental elements that make up a computer system	Identifying how users and organisations can protect themselves from cyberattacks.	Interface design, types and concepts	Interface design, types and concepts
Builds on: (pre-knowledge)	Basic computer use	New Concept	New Concept	BTEC DIT Exam Syllabus	
Leads to: (future learning)	Using computer safely	GCSE Computer Science Unit 1	GCSE Computer Science Unit 4		
Component 2	Modelling Data	Developing for the web	Data Science	Component 1, Exploring User Interface Design Principles (Cont...)	Component 1, Exploring User Interface Design Principles (Cont...)
Key concepts:	Sorting and filtering data and using formulas and functions in spreadsheet software.	Using HTML and CSS to create webpages.	Using data to investigate problems and make real-world changes.	Interface design, types and concepts	Interface design, types and concepts
Builds on: (pre-knowledge)	New concept	New Concept	Sorting and filtering data and using formulas and functions in spreadsheet software.	BTEC DIT Exam Syllabus	
Leads to: (future learning)	Using data to investigate problems and make real-world changes.	Use planning tools to design and build a user interface	Interpretation of data using spreadsheet software		
Component 3	Intro to programming – Scratch 1	Introduction to Python	Media (Animations)	BTEC DIT Component 1 assessment	BTEC DIT Component 1 assessment
Key concepts:	Applying the programming constructs of sequence, selection, and iteration in Scratch	Applying the programming constructs of sequence, selection, and iteration in Python.	Creating 3D animations through object manipulation, and tweaking and adjusting lighting and camera angles.	Use planning tools to design and build a user interface	Use planning tools to design and build a user interface
Builds on: (pre-knowledge)	New Concept	Applying the programming constructs of sequence, selection, and iteration in Scratch	Creating vector graphics through objects, layering, and path manipulation.	BTEC DIT Exam Syllabus	
Leads to: (future learning)	Using subroutines to decompose a problem that incorporates lists in Scratch.	Python Programming using Sequences of Data	Video Production		
Component 4	Intro to programming Scratch 2	Media – Vector Graphics	Physical Computing	Component 3 Exam study	Component 3 Exam Revision
Key concepts:	Using subroutines to decompose a problem that incorporates lists in Scratch.	Creating vector graphics through objects, layering, and path manipulation.	Sensing and controlling with the micro:bit.	BTEC Component 3 Effective digital working practices. First introduction to exam material	BTEC Component 3 Effective digital working practices
Builds on: (pre-knowledge)	Applying the programming constructs of sequence, selection, and iteration in Scratch	New Concept	Applying the programming constructs of sequence, selection, and iteration in Python.	BTEC DIT Exam Syllabus	
Leads to: (future learning)	Applying the programming constructs of sequence, selection, and iteration in Python.	Creating 3D animations through object manipulation, and tweaking and adjusting lighting and camera angles.	BTEC DIT Component, Understanding Computer Interfaces		
Component 5	Using Media Appropriately	Mobile App Devices	Python Programming using Sequences of Data	Component 3 Exam study	Exams
Key concepts:	Creating a digital product for a real-world cause.	Using event-driven programming to create an online gaming app	Manipulating strings and lists. Creating a programming project.	BTEC Component 3 Effective digital working practices. Continue study of exam material	
Builds on: (pre-knowledge)	New Concept	Applying the programming constructs of sequence, selection, and iteration in Python.	Python Programming using Sequences of Data	BTEC DIT Exam Syllabus	
Leads to: (future learning)	DT product design	Creating 3D animations	Advanced Python programming using lists and routines		
Component 6	Solving problems	Representations – From Clay to Silicon	End of KS3 Project (Workplace skills)	Component 2 Collecting, Presenting and Interpreting Data	N/A
Key concepts:	Using https://blockly.games/ , solve a series of complex online coded puzzles	Representing numbers and text using binary digits.	Using research effectively to understand the local job market	Introduction: How spreadsheets can be used to interpret data	
Builds on: (pre-knowledge)	Using subroutines to decompose a problem that incorporates lists in Scratch.	New Concept	Builds on understanding handling data	BTEC DIT Exam Syllabus	
Leads to: (future learning)	Advanced problem solving	GCSE Computer Science Unit 3	Career paths in Computer Science		

