Cambridge Technicals Level 3 in IT

Writing Code
There are many good resources for learning to write code and to practice your coding skills. Select a program of your choice and create various programs.

	Think Python Learning with Python 3 Peter Wentworth, Jeffrey Elkner, Allen B. Downey, Chris Meyers Oct. 2012 http://openbookproject.net/thinkcs/python/english3e/index.html	One of the best free books on learning to program using python. The emphasis is on understanding why we write code and solve problems in a particular way, which is useful for A-level students. The book is well organised, with plenty of exercises in each chapter, plus a glossary of key words.
Teach-ICT		
Understanding the requirements of the development of the life cycle	http://www.teach-ict.com/as_a2_ict_new/ocr/A2_G063/331_systems_cycle/slc_stages/miniweb/pg4.htm	The system life cycle is used to explain what happens during each stage business application e.g. a new mobile App, a new car, a new smart phone etc.
Appshed AppShed Game Maker is a platform for beginners (and experts) to build HTML5 games.		
	Register using the starter account. https://appshed.com/appbuilder/login/register Instructions to create the game https://appshed.com/create/game-maker	Game Maker is part of the AppShed platform. The games you build become part of your app. Your apps can include a combination of app items (content) and games. You can easily Publish and Share your apps allowing others to play your games. Simply follow the instructions for Publishing, and then share the URL/web link with friends or post on social media. Game Maker is built for education and learning. The aim is to provide learners with a simple interface and enjoyable experience while they get to grips with important concepts of computational thinking and coding.

Game Development The course consists of game development.		
	https://www.unrealengine.com/en-US/ https://unity.com/	Produce a report on the possible games that can be developed using the platform.
Coding		
	https://www.tutorialspoint.com/codingground.htm Online editor https://www.tutorialspoint.com/online_html_editor.php	Select HTML 5 and create a simple webpage on a topic of your choice. You will be directed to an online editor.

Enrichment Activities to keep you busy during the Summer!

National Museum of Computing, Bletchley Park (Near Milton Keynes)	http://www.tnmoc.org/ https://www.bletchleypark.org.uk/ http://www.codesandciphers.org.uk/bletchleypark/ (virtual tour)	The National Museum of Computing and the Bletchley Park code breaking exhibition are both on the same site, although each has a separate entrance fee. Huge range of technology to explore, including Colossus, the world's first electronic computer.
Science Museum, London	http://www.sciencemuseum.org.uk/	A wide range of science and technology exhibitions. In particular, the museum is currently hosting an exhibition on robotics, charting our 500 year quest to make machines human.
Centre for Computing History, Cambridge	http://www.computinghistory.org.uk/	A large collection of vintage and retro computers, with an emphasis on how computers have developed over time and the social context and impact of technological change.

Education is a lifelong learning adventure.

Never stop.