Year group: 10	Term: 3	Unit duration: 6	Number of lessons: 9	Unit title: Systems Analysis and Robustness

Assessment outcome: To understand how to write and maintain robust and reliable software.	Fertile question? How can we ensure our programs won't fail in unforeseen circumstances?	

Key skills/concepts/knowledge that students should cover	Start RAG	End RAG	Literacy. Key vocabulary/subject terminology that students should cover
Defensive design considerations - designing a program to keep working through all possibilities **Errors - syntax and logic errors** **Data sanitisation, Validation and Authentication - anticipating likely errors when writing code** **Human error - how build programs that can deal with PEBKAC issues**			**Validation** **Data Sanitisation** **Authentication** **Maintainability** **Erroneous** **Masking** **Syntax** **Logical**

Stretch. Key skills/concepts/knowledge that students should cover		**Suggested materials teachers could/should use**
Write a program that requires a user to enter a valid password of a certain length and containing certain characters.		**TeachICT** **Computer Science Powerpoints/Worksheets**
		Key home learning tasks students should complete Identify errors in code and correct them.