



Year 11

Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Algorithms Purpose: This unit will teach students vital problem solving skills, how to design a software solution to a given problem and prepare students for their GCSE Exam. Overview of the knowledge and skills covered in this unit: • Computational Thinking • Searches • Sorts • Pseudocode • Flowcharts • Trace Tables How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Fundamentals of Programming Purpose: This unit will teach students the fundamentals of programming in Python allowing them to progress their skills and understanding toward the higher end of the GCSE Spec and further education. Overview of the knowledge and skills covered in this unit: • Sequence, Selection, Iteration • Stings • File Handling • SQL • Data Types How will this be assessed? • Midpoint Assessment • Practice Exam Questions • November Mock Exams	Producing Robust Programs Purpose: This unit will ensure students know how to create a functional program that will handle user error or failures gracefully. Overview of the knowledge and skills covered in this unit: • Defensive Design • Testing & maintainability How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Boolean Logic Purpose: This unit will give students a deep understanding of boolean logic and how decisions are made based on an electrical signal. Overview of the knowledge and skills covered in this unit: • Logic Diagrams • Truth Tables • Combining and applying Operators How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Languages and IDE's Purpose: This unit will explore how high and low level languages differ and how programmers use the functions of IDE's to support their development, giving students a good insight into software development for the future. Overview of the knowledge and skills covered in this unit: • High level languages • Low level languages • Translators • Compilers and Interpreters & IDE's How will this be assessed? • Midpoint Assessment • Practice Exam Questions	Students will be sitting their External GCSE Exams this Half Term.