North Gosforth Academy

Computing: Curriculum plan 2024 – 2025

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Yr7	**Getting Started** Logging in File management Cloud computing & VLE **E-Safety** Digital wellbeing Keeping safe online	**Word Processing Skills** Using the keyboard Formatting Presentation Functions Shortcuts Assessment 1	**Using DTP** Creating leaflets using functions, design and layout for a given audience	**Kodu Gaming Lab or Scratch** Intro to Scratch environment & sequencing Sequencing Using variables Selection Logical operators Iteration	**Inside a computer** Hardware Software Inputs and outputs Performance Storage devices	**Basic Spreadsheets** Cell references, rows and columns Formatting techniques Using basic formulae Using functions (SUM, MIN, MAX, COUNT Creating charts Assessment 2
Yr8	**Digital Safety** Digital footprint Passwords & phishing Malware Encryption Automating encryption	**Using Microsoft PowerPoint** Creating a PowerPoint using functions, design and layout for a given audience Assessment 1	**Scratch or Introduction to Python** Sequencing Variables Data types Operators	**Flowcharts and Algorithms** Using computational thinking to solve problems Pattern recognition Using flow diagrams to solve problems	**More Spreadsheets** Recap year 7 Boolean operators Formatting graphs and charts Simple Modelling	**Bitmaps and Vectors** Vector graphics Basic shapes Create vector graphics Combining graphics to create objects suitable for purpose Assessment 2
Yr9	**Cyber Security** How human error causes risks and social engineering Cyber attacks Minimizing risks Data Protection Act and Computer Misuse Act	**Interface design** Purpose of interface Design requirements Planning, creating and reviewing user interfaces. Images, hyperlinks, navigation Assessment 1	**Introduction to Python 1 or Further Python 2** Placeholders & lists Working with lists Selection IF statements If else statements Strings Loops	**Binary** Logic gates Data representation **Computer Systems** Protocols Networks Topologies	**Advanced Spreadsheets** Recap year 8 Drop down lists VLOOKUP & sorting data Checkboxes Macros Logical operators REPT function	**Visual Graphics Photoshop** Using graphics Generate and develop ideas Using tools to enhance images Working with colour Special effects Assessment 2

Yr10 GCSE CS	**Unit 1** **Computer Systems** System Architecture	**Unit 1** **Computer Systems** Memory & Storage	**Unit 1** **Computer Systems** Computer Networks, Connections and Protocols	**Unit 1** **Computer Systems** Network Security	**Unit 1** **Computer Systems** System Software	**Unit 1** **Computer Systems** Ethics, Legal, Cultural impacts of Digital Technology
Yr11 GCSE CS	**Unit 2** **Computational thinking, algorithms and programming** Algorithms	**Unit 2** **Computational thinking, algorithms and programming** Refining Algorithms	**Unit 2** **Computational thinking, algorithms and programming** Searching & Sorting Algorithms	**Unit 2** **Computational thinking, algorithms and programming** Programming Fundamentals	**Unit 2** **Computational thinking, algorithms and programming** Additional Programming IDE's Defensive Design	**Revision** Unit 1 & 2 Assessment
Yr10 BTEC DIT	**Component 1** User interface design & project planning techniques	**Component 1** User interface design & project planning techniques	**Component 1** User interface design & project planning techniques	**Component 1** User interface design & project planning techniques Component 1 Assessment	**Component 2** Collecting, presenting and interpreting data	**Component 2** Collecting, presenting and interpreting data
Yr11 BTEC DIT	**Component 2** Collecting, presenting and interpreting data	**Component 2** Collecting, presenting and interpreting data Component 2 Assessment	**Component 3** Effective digital working practices	**Component 3** Effective digital working practices	**Component 3** Effective digital working practices	**Component 3** Effective digital working practices Component 3 Assessment

Relates to GCSE Computer Science

Relates to BTEC Digital Information Technology