Year 7 ICT

AUTUMN TERM

Collaborating Online Respectfully

- Memorable and Secure password
- Respectful Email
- How to communicate online with peers
- Presentation skills
- Safe talking online

Spreadsheets

- Getting to know spreadsheets
- Quick calculations
- Collecting Data
- Create Charts and Graphs
- Sort, Filter and Summarize data

SPRING TERM

Networks

- Computer networks and protocols
- Network hardware
- Wired and wireless networks
- The internet
- Internet services

Scratch Programming

- Introduction to programming and sequencing
- Sequence and Variables
- Selection
- Operators

SUMMER TERM

Scratch Programming 2

- You've got the moves
- Fly cat, fly
- Loop the loop
- Treasure those lists
- Translate this!

Using media for a cause

- Features of a word processor
- Licensing appropriate images
- Credibility of sources
- Research and plan a blog
- Promoting a cause

YEAR 7 CURRICULUM OVERVIEW

In this curriculum, students will look at the world around them and analyse how ICT and computing helps them to progress in life. They will be challenged to look at programming and design, as well as developing soft skills of typing, research and analysis of text to make better use of technology on a daily basis. This will be to allow students a better understanding of key skills needed in the ICT industry and the types of career paths that are also available and on offer.

Year 8 ICT

AUTUMN TERM

Vector Graphics

- Drawing vector shapes
- Manipulate group objects
- Convert objects to paths
- Creating Vector Graphics
- Understanding Vector Graphics

Creating a digital User Interface

- Planning a User Interface
- Creating a time plan (GANTT Chart)
- Designing a user interface plan
- Building a user interface
- Evaluating the user interface

SPRING TERM

Introduction to Python

- Algorithms and programs
- Calculations through programs
- Binary selection
- Multi branch selection
- While Loops
- Creating a program

Control Systems

- Understand what a control system is
- Sequencing Instructions
- Open and closed loop systems
- Making selections in control systems
- Inputs and selection choices
- Variables and Sub-routines

SUMMER TERM

Computing Systems

- Computing hardware
- Computer system architecture
- How to execute a command
- NOT, AND, OR Logic Gates
- AI

YEAR 8 CURRICULUM OVERVIEW

In this curriculum, students will look at the world around them and analyse how ICT and computing help them to progress in life. They will be challenged to program and design, as well as developing soft skills of typing, research and analysis of text to make better use of technology on a daily basis.

Year 9 ICT

AUTUMN TERM

Cyber Security

- You and Your Data
- Social Engineering
- Hacking
- Malware and Bots
- Security threats to networks
- Cyber attack prevention

Escape Room Product

- Plan and develop an escape room
- Create assets for the product
- Creating hyperlinks
- Testing a product
- User feedback

SPRING TERM

Mobile App Development

- Understanding GUI's
- Event: control, flow and input
- Fixing common coding errors
- Building a mini App

Spreadsheets - Advanced

- Calculations
- Conditional Formatting and data validation
- IF statements
- VLookup
- Macros
- Data Dashboards and Graphs

SUMMER TERM

Databases

- Creating a flat file Database
- Data validation methods
- Creating forms
- Creating queries

YEAR 9 CURRICULUM OVERVIEW

In this curriculum, students will look at the world around them and analyse how ICT and computing helps them to progress in life. They will be challenged to look at programming and design, as well as developing soft skills of typing, research and analysis of text to make better use of technology on a daily basis. This will be to allow students a better understanding of key skills needed in the ICT industry and the types of career paths that are also available and on offer.

Year 10 ICT

AUTUMN TERM

Component 1: Exploring User Interface Design & Project Planning Techniques (30%)

Students undertake a 6 hour controlled coursework task. They will be planning and developing a User Interface for use by a company outlined in the assignment brief.

Task Breakdown:

- Task 1a: Project Proposal - 12 marks
- Task 1b: Timescale planning (Gantt Chart) - 12 marks
- Task 2: Initial designs for the Interface - 12 marks
- Task 3: Interface Prototype - 12 marks
- Task 4: Evaluation of the project. - 12 marks

SPRING TERM

Component 2: Collecting, presenting and interpreting data (30%)

Students undertake a 6 hour controlled coursework task. They will be analysing a spreadsheet and making useful and meaningful data from it.

Task Breakdown:

- Task 1: Evaluation of data collection methods - 12 marks
- Task 2: Analysis of data from the spreadsheet and creation of graphs - 24 marks
- Task 3: Reporting on findings from a spreadsheet and errors that may exist - 24 marks.

SUMMER TERM

Component 3: Effective Digital Working Practices (40%)

Students will be preparing their knowledge and understanding in preparation for their examination in May 2025

Areas of Study:

Learning Aim A:

- Modern Technologies
- Impact of Modern Technologies

YEAR 10 CURRICULUM OVERVIEW

In this coursework unit of study, we will prepare students for the modern digital world where they will live and work. Students will be able to draw on their experiences of using different technologies. This is because students often use and are aware of different types of technologies and what they do; however, they may not always understand how they work, how they interconnect and the implications of using them. Drawing on their past experiences allows students' knowledge to be developed further and for them to learn how it can be used to enhance the world to make it a more effective platform for others to communicate and participate.

Year 11 ICT

AUTUMN TERM

Component 3: Effective Digital Working Practices (40%)

Students preparing their knowledge and understanding in preparation for their examination in May 2025

Learning Aim B:

- Threats to Data
- Prevention and Management of Threats

Learning Aim C

- Policies
- Responsible Use parameters
- Disaster recovery
- Responsible Use
- Legislation

SPRING TERM

Component 3: Effective Digital Working Practices (40%)

Students will be preparing their knowledge and understanding in preparation for their examination in May 2025

Areas of Study:

Learning Aim D

- Forms of Notation

SUMMER TERM

Component 3: Effective Digital Working Practices (40%)

- Revision for Exam
- Exam

YEAR 11 CURRICULUM OVERVIEW

In this coursework unit of study, we will prepare students for the modern digital world where they will live and work. Students will be able to draw on their experiences of using different technologies. This is because students often use and are aware of different types of technologies and what they do; however, they may not always understand how they work, how they interconnect and the implications of using them. Drawing on their past experiences allows students' knowledge to be developed further and for them to learn how it can be used to enhance the world to make it a more effective platform for others to communicate and participate.

Year 12 ICT

AUTUMN TERM

Unit 6: Website Development

- Understand the principles of website development
- Design a website to meet client requirements
- Develop a website to meet client requirements

SPRING TERM

Unit 2: Creating Information Systems

- The purpose and structure of relational database management systems
- Standard methods and techniques to design relational database solutions
- Creating a relation database structure
- Evaluating a database

SUMMER TERM

Unit 3: Social Media in Business

- Explore the impact of social media on the ways in which businesses promote their products and services

YEAR 12 CURRICULUM OVERVIEW

In this course, students are developing a common core of IT knowledge and study areas such as the relationship between hardware and software that form an IT system, managing and processing data to support business and using IT to communicate and share information. Over the course of Year 12 students will specifically study, how businesses use social media to promote their products and services. Learners also implement social media activities in a business to meet requirements. Before moving on to study the design, creation, testing and evaluation of a relational database system to manage information.

Year 13 ICT

AUTUMN TERM

Unit 1: Information Systems

- Protecting data and information
- Impact of IT systems
- Issues
- Digital devices in IT systems
- Transmitting data
- Operating Online

SPRING TERM

Unit 3: Social Media in Business

- Develop a plan to use social media in business to meet requirements
- Implement the use of social media in a business

SUMMER TERM

<u>YEAR 13 CURRICULUM OVERVIEW</u>

In this course, students are developing a common core of IT knowledge and study areas such as the relationship between hardware and software that form an IT system, managing and processing data to support business and using IT to communicate and share information. Over the course of Year 12 students will specifically study, how businesses use social media to promote their products and services. Learners also implement social media activities in a business to meet requirements. Before moving on to study the design, creation, testing and evaluation of a relational database system to manage information.