Computing Department Rationale

Through a broad, in-depth and varied study of information technology, computer science and digital skills, students will become effective digital citizens.

During Core Computing lessons throughout years 9 and 10, students will be given the opportunity to complete the bronze and silver iDEA award. iDEA is a programme that helps develop digital, enterprise and employability skills in an engaging online environment. Students who complete the award will receive certificates for their Record of Achievement.

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology.

YEAR 9	Content	Skills	Rationale / Link to NC
Autumn Term 1 **Unit 1 - Presentation software skills**	Use the practice assessments 1 to 5 in the team drive	• Presentation skills for visual aids • Independent learning • Reading and understanding questions	Students will apply information technology to solve problems from each of the practice tasks. Many students are able to use powerpoint as presentation software but they have often developed bad habits whilst also being unaware of the

			professional tools available in the software. Presentations are visual so make an effective place to start.
Autumn Term 2 **Unit 2 - Word processing skills**	Ue the practice assessments 1 to 6 in the team drive	• Presentation skills for documents • Independent learning • Reading and understanding questions • Proofreading • Spell checking	Students will apply information technology to solve problems from each of the practice tasks. Students are often required to produce word processed work, but tend to display bad habits, such as large, difficult to read fonts and poorly aligned work that is not checked. They tend also to be unfamiliar with the range of professional tools available.

Spring Term 1 and 2 **Unit 3 - Spreadsheet skills**	Complete the skill building tasks from the team drive, then move onto each of the practice tasks 1 to 6	• Presentation skills • Independent learning • Reading and understanding questions • Accuracy (Data Entry) • Analysis • Formatting • Formulas and Functions • Organisation	Students will apply information technology to solve problems from each of the practice tasks. Spreadsheets can be off putting to students if they feel maths is not a strong point. Each of the tasks is designed to build confidence in the use and presentation of numerical data.Once they realise the maths is done for them and that it is the data labels that are important, they use spreadsheets with confidence.
Summer Term 1 **Unit 4 - Development games/apps/ web**	Students can use scratch for the racing car game. Appshed for the app development. They can use wordpress or google sites for the website	• Presentation skills that are more entertainment media based • Independent learning • Creativity • Problem solving	Students will apply information technology to solve problems from each of the practice tasks.

Summer Term 2 **Photography**	Use the resources in the team drive. Begin with the presentation on the rules of photography, using the links embedded. Then create and edit photos using appropriate hardware and software.	● Presentation skills for images ● Independent learning ● Reading and understanding the rules of photography ● Creativity	Students will learn and be able to give examples of the rules of photography.They can then create and edit their own images to show what they have learned.This topic is a creative one and provides increased breadth in the curriculum when compared with the office based application software.It is particularly important that students understand how photographs can be manipulated in the context of social media and digital marketing.