

INFORMATION COMMUNICATION TECHNOLOGY

ROAD MAP TO SUCCESS

**Years
10 & 11**

THE FUTURE

Starting in 2025/26 we will be offering a GCSE option in ICT. The course will be developed to utilise the knowledge and skills that students have learnt during their time in Key Stage 3. The GCSE course will run through their time in Years 10 and 11 and will give our students the skills and knowledge to continue their ICT journey at Key Stage 5 and beyond.

Year 8

LET'S DO IT

We will be looking into continuous development of student's ICT skills and knowledge. Students look into creating images using vector graphics; how different areas of the internet can affect them through a unit on online safety before looking into software and hardware, boolean logic and computational logic in the final Year 8 unit on layers of computing systems.

**Students will
complete end of
unit tests at the
end of each unit,
before completing
an end of year
assessment in
June.**

Year 9

KEEP GOING

We continue with developing a wider understanding of ICT in Year 9, starting with how ICT in the workplace is a common factor in daily life. We take the next step in creativity through looking at 3D modelling using TinkerCad, before finishing Year 9 by introducing the idea of cybersecurity and how students can stay safe online.

Year 7

FIRST STEPS

Firstly we look in to what ICT @ Seahaven is and how ICT will be used in KS3 and beyond. We then look at the basic workings of networks, from semaphores to the internet; followed by using clear messaging in digital media. Students will also leave Year 7 with a knowledge of how computing systems work and will start to show understanding of how to use Office 365.



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YEAR 7 ROAD MAP TO SUCCESS

Terms 1 & 2

INTRODUCTION TO ICT AT SEAHAVEN ACADEMY

Students start their ICT journey at Seahaven with a term based on and around learning how to work within an ICT suite; how to log on to Satchel One, Bedrock and Sparx; an introduction to Microsoft Office 365, which students will use through KS3 to complete their online workbooks. Students will then complete isolated tasks on aspects of Microsoft Office 365 to start developing their key knowledge in this area.

Terms 3 & 4

NETWORKS FROM SEMAPHORES TO THE INTERNET

Imagine a world without computer networks: there would be no more YouTube, Google, instant messaging, online video gaming, Netflix, and iTunes; no online shopping; no file sharing; and no central backups of information. This unit begins by defining a network and addressing the benefits of networking, before covering how data is transmitted across networks using protocols. The lessons will comprise of networks and their protocols; networking hardware; wired and wireless networks; the internet; internet services and finishing off with a lesson on the World Wide Web.

Terms 5 & 6

CLEAR MESSAGING IN DIGITAL MEDIA

This unit is designed to build upon learners' experience in key stage 2. It requires students to use a range of different skills across several pieces of software. They will work between different applications to create a poster and slides on a given theme. This project has been designed so that learners can concentrate on applying skills that they may have previously learnt at Key Stage 2 as well as those learnt in this unit. Students are given clear tasks for which they need to first plan and then implement a solution.

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YEAR 8 ROAD MAP TO SUCCESS

Terms 1 & 2

VECTOR GRAPHICS

This unit offers students the opportunity to design graphics using vector graphic editing software. By the end, students will have produced an illustration, a logo, or some icons using vector graphics. The lessons are tailored to Inkscape (inkscape.org), which is an open source and cross-platform software. Vector graphics can be used to design anything from logos and icons to posters, board games, and complex illustrations. Through this unit, learners will be able to better understand the processes involved in creating such graphics and will be provided with the knowledge and tools to create their own.

Terms 3 & 4

ONLINE SAFETY

As most students will already have some form of online presence and familiarity with online spaces, the purpose of this unit is for them to start thinking more critically about how they, and others, conduct themselves online. Students will also be asked to discuss key debates around the online world, such as the extent of their right to privacy, and which powers should be granted to organisations and states. As much as possible, students should be encouraged to develop their own ideas and opinions in order to become engaged citizens when it comes to online rights.

Terms 5 & 6

LAYERS OF COMPUTING SYSTEMS

This unit takes students on a tour through the different layers of computing systems: from programs and the operating system; the physical components that store and execute these programs to the fundamental binary building blocks that these components consist of. The aim is to provide a concise overview of how computing systems operate, conveying the essentials and abstracting away the technical details that might confuse or put off learners. The last lessons cover two interesting contemporary topics: artificial intelligence and open source software. These are linked back to the content of the unit, helping learners to both broaden their knowledge and focus on the topics addressed in the unit. The unit assumes no prior knowledge.

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YEAR 9 ROAD MAP TO SUCCESS

Terms 1 & 2

ICT AND THE WORLD OF WORK

The world of work has been transformed by the use of information technologies. Students must be able to identify how the modern structure of the workplace will impact their future lives. This unit will facilitate a deeper comprehension of the methods employed by organisations and the impact the use of IT in the working environment has on all stakeholders.

Terms 3 & 4

CREATING MEDIA - 3D MODELLING

Learners will develop their knowledge and understanding of using a computer to produce 3D models. Learners will initially familiarise themselves with working in a 3D space, moving, resizing, and duplicating objects. They will then create hollow objects using placeholders and combine multiple objects to create a model of a desk tidy. Finally, learners will examine the benefits of grouping and ungrouping 3D objects, then go on to plan, develop, and evaluate their own 3D model of a building.

Terms 5 & 6

INTRODUCTION OF CYBERSECURITY

This unit takes students on a journey of discovery of techniques and ways that cybercriminals use to steal data, disrupt systems, and infiltrate networks. The students will start by considering the value their data holds and what organisations might use it for. They will then learn about social engineering and other common cybercrimes, and finally look at methods to protect against these attacks.

INFORMATION COMMUNICATION TECHNOLOGY

SOFTWARE INFORMATION

Office 365

Office 365

TinkerCAD



Canva



Inkscape



We are dedicated to giving our students a broad range of experiences whilst using a wide range of software packages during their time at Seahaven. They will use Microsoft Office 365 as the main way of recording their work alongside industry known software such as TinkerCAD, Inkscape along with professional standard websites that include Canva.