COMPUTING – YR7

Units taught in Year 7

AUTUMN	SPRING	SUMMER
Project 1: Information Technology Students learn about computer hardware including: input, output and storage devices. They also learn about software, computer networks and e-safety.	Project 2: Computational Thinking Students will look at computational thinking to help them develop problem solving skills and solutions in a way that a computer could execute. Choice	Project 3: Creative Communication Students will look at how media is displayed in an online environment. They look at how to create web pages using html and CSS.
Project 1: Units 5.1 Hardware - understanding input devices 5.2 Identifying output and storage devices 5.3 Understanding software 5.4 Connecting computers together 5.5 Staying safe online 5.6 Watch Out	Project 2: Units 1.1 What is Computational Thinking 1.2 Pattern recognition 1.3 Flow charts 1.4 Selection and if then statements 1.5 Loops 1.6 Evaluation	Project 3: Units 6.1 Starting HTML 6.2 Using tags 6.3 Formatting text 6.4 Designing your web page 6.5 Creating a web page 6.6 Editing a web page

Main skills developed in Year 7:

- An understanding of key parts of a computer system.
- How to be a safe and responsible digital citizen.
- Desktop publishing skills.
- Problem solving skills.
- An understanding of how the World Wide Web works.
- How to code using HTML

COMPUTING – YR7 - CONT

How parents can help to support their son's/daughter's learning:

Encourage practicing the skills they learn at school with particular attention to learning to program in different languages by downloading and installing the relevant software which is freely available at no charge. Students will be given the links to the sites where they can find the software for free.

Students will be set homework activities for longer projects which require work to be produced and used in the following lessons.

We provide the following extra-curricular clubs:

- Homework drop in sessions during lunchtimes or after school

COMPUTING – YR8

Units taught in Year 8

AUTUMN	SPRING	SUMMER
Project 1: Data and the CPU Students learn about how computers interpret binary data as instructions. They learn how to: •Count and convert between binary and decimal numbers. •How to use different codes from history that have influenced modern day computing.	Project 2: Introducing Python Students will use a higher level coding language whilst learning about key programming concepts such as: •Algorithms •Variables •Selection •Processes	Project 3: Visual Coding Students will use a visual coding environment to develop a digital application. The key programming concepts learned in project 2 will need to be applied to create an application with a visual interface.
Project 1: Units 3.1 What is a computer 3.2 What is a byte 3.3 From decimal to binary 3.4 Counting in binary 3.5 Using codes 3.6 The codes computers use	Project 2: Units 4.1 Begin Python 4.2 Create and run a program 4.3 Variables 4.4 Plan a process 4.5 Your answer - right or wrong 4.6 Keep score	Project 3: Units 2.1 Design the touch screen interface 2.2 Create program code 2.3 Reset button 2.4 Display an image 2.5 Password protection 2.6 Test and evaluate

Main skills developed in Year 8:

- Main Skills developed in Y8
- An understanding of how a computer uses binary.
- An understanding of how and why codes are used.
- How and why key programming concepts are used.
- How to program in a higher level coding language.
- How to program in a visual coding language.

COMPUTING – YR8 - CONT

How parents can help to support their son's/daughter's learning:

Encourage practicing the skills they learn at school with particular attention to learning to program in different languages by downloading and installing the relevant software which is freely available at no charge. Students will be given the links to the sites where they can find the software for free.

Students will be set homework activities for longer projects which require work to be produced and used in the following lessons.

We provide the following extra-curricular clubs:

- Homework drop in sessions during lunchtimes or after school

COMPUTING – YR9

Units taught in Year 9

AUTUMN	SPRING	SUMMER
Introduction to the course and organisational skills	Musical Qwerty Keyboard	Networks
Problem Solving / Computational Thinking		Logic
Data Representation/ Binary Numbers	Hardware & Software	Data Representation/Text
Programming Basics 01		

Main skills developed in Year 9:

Computer Science students at Bridlington School develop knowledge and understanding of how technology can be used to help proactively with current issues that impact on modern society, preparing them for their next steps in today's global world. Students will develop transferable skills for progression to higher education. We teach the 'underpinning' concepts, which are useful in many subjects, for example mathematics, science, and engineering. The rigorous approach to the subject will facilitate a smooth transition to the next level of study.

COMPUTING – YR9 - CONT

How parents can help to support their son's/daughter's learning:

Encourage practicing the skills they learn at school with particular attention to learning to program in different languages by downloading and installing the relevant software which is freely available at no charge. Students will be given the links to the sites where they can find the software for free.

Students will be set homework activities for longer projects which require work to be produced and used in the following lessons.

We provide the following extra-curricular clubs:

- Homework drop in sessions during lunchtimes or after school

COMPUTING – YR10

Units taught in Year 11

AUTUMN	SPRING	SUMMER
The Bigger Picture	Programming/Coding Basics 03 & Problem solving Project	Secondary Storage
Data Representation Graphics and Sound		Internet and WWW
Internal Components	Programming/Coding Basics 03 & Problem solving Project	Encryption
Network security		NEA/Coursework Preparation

Main skills developed in Year 10:

Computer Science students at Bridlington School develop knowledge and understanding of how technology can be used to help proactively with current issues that impact on modern society, preparing them for their next steps in today's global world. Students will develop transferable skills for progression to higher education. We teach the 'underpinning' concepts, which are useful in many subjects, for example mathematics, science, and engineering. The rigorous approach to the subject will facilitate a smooth transition to the next level of study.

COMPUTING – YR10 - CONT

How parents can help to support their son's/daughter's learning:

Encourage practicing the skills they learn at school with particular attention to learning to program in different languages by downloading and installing the relevant software which is freely available at no charge. Students will be given the links to the sites where they can find the software for free.

Students will be set homework activities for longer projects which require work to be produced and used in the following lessons.

We provide the following extra-curricular clubs:

- Homework drop in sessions during lunchtimes or after school

COMPUTING – YR11

Units taught in Year 11

AUTUMN	SPRING	SUMMER
Databases	NEA/Coursework	Revision and Exam Skills
Embedded Computers	Revision and Exam Skills	Exams

Main skills developed in Year 11:

Computer Science students at Bridlington School develop knowledge and understanding of how technology can be used to help proactively with current issues that impact on modern society, preparing them for their next steps in today's global world. Students will develop transferable skills for progression to higher education. We teach the 'underpinning' concepts, which are useful in many subjects, for example mathematics, science, and engineering. The rigorous approach to the subject will facilitate a smooth transition to the next level of study.

COMPUTING – YR11 - CONT

How parents can help to support their son's/daughter's learning:

Encourage practicing the skills they learn at school with particular attention to learning to program in different languages by downloading and installing the relevant software which is freely available at no charge. Students will be given the links to the sites where they can find the software for free.

Students will be set homework activities for longer projects which require work to be produced and used in the following lessons.

We provide the following extra-curricular clubs:

- Homework drop in sessions during lunchtimes or after school