

# Post 16 Digital Curriculum Plan 2024-2026

## Cyber Digital 1

### Year 12

#### Unit 2 – Fundamentals of Computer Systems

##### Written Exam

In this unit, you will explore the relationship between hardware and software as part of a computer system. You will examine the way computer components work both individually and together to store and process data, and the way in which data is transmitted and used in computer systems.

#### Unit 7 - IT Systems Security and Encryption

##### Coursework

In this unit, you will investigate the many different types of security attack, the vulnerabilities that exist and techniques that can be used to defend the IT systems of organisations. Many organisations run complex IT networks and need them to be secure while providing a safe environment for their employees to work, sharing some data and keeping other data private.

### Year 13

#### Unit 1 – Principles of Computer Science

##### Written Exam

In this unit, you will explore the logical and structured ways that computer systems process data to develop programs, processes and systems that solve specific problems. You will examine the features of effective computer programming and apply accepted computing and programming paradigms.

#### Unit 10 – Human Computer Interaction

##### Coursework

In this unit, you will consider how technology has evolved to improve the communication between the device and the user. You will explore the implications of using various interfaces, by applying HCI principles to justify your decision making. You will also develop a solution to a HCI-based scenario, by using an appropriate programming language or software/hardware tools

## Cyber Digital 2

### Year 12

#### Unit 8 – Business Applications of Social Media

##### Coursework

You will explore different social media websites, the ways in which they can be used and the potential pitfalls when using them for organisational purposes. You will develop a plan to use social media strategies within an organisation to achieve its specific business aims and objectives

#### Unit 9 – The Impact of Computing

##### Coursework

In this unit, you will develop an understanding of the positive and negative impacts of computing development on an organisation or business when it implements a new system. You will consider the general impact on individuals and society as a whole, and the potential impacts of computing development in the future.

### Year 13

#### Unit 3 – Planning and Management of Computing Projects

##### Practical Exam

This unit explores the business case needed for the initial approval of a computing solution to meet organisational needs. It will provide you with the skills associated with project planning and management: task scheduling, budgeting, risk management, time management, quality management, and communication with all stakeholders throughout the life cycle of the project.

#### Unit 14 – Computer Games Development

##### Coursework

In this unit, you will investigate the technologies used in the computer gaming industry and the implications they have for users, developers and organisations. You will analyse how user needs and preferences impact on game design and how target technologies affect the design and development of a computer game.

## Cyber Digital 3

### Year 12

#### Unit 4 – Software Design and Development Project

##### Practical Exam

In this unit, you will explore the skills necessary to design and create software. You will explore standard conventions and ways of working to create solutions to problems. You will examine a given scenario and develop effective design solutions to produce software.

#### Unit 15 – Website Development

##### Coursework

In this unit, you will review existing websites – commenting on their overall design and effectiveness. You will use scripting languages such as Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript® and a simple text editor, or rapid application development tools.

### Year 13

#### Unit 19 – Computer Networking

##### Coursework

In this unit, you will learn about the major types and models of computer networks. You will identify the computer network hardware and software components required to design and implement networks.

#### Unit 21 – Virtualisation

##### Coursework

In this unit, you will explore the scope of virtualised solutions, how different types of virtualisation can be used to meet user/business needs and the impact that implementing virtualised solutions has on individuals and organisations.

#### Unit 22 - Systems Analysis and Design

##### Coursework

In this unit, you will learn how to use systems analysis methods to examine an organisation and analyse its current systems. You will learn how to plan for the implementation of a new or revised system that is specific to the client's requirements.