The Beacon Centre

Computing

A Media Focused Programme of LEarning for ICT / Computing, covering all aspects of the National Curriculum for England as outlined by the DfE. The programme encourages students to understand the changing nature of ICT and technology usage through engaging with it in creative ways. The programme has been designed to allow young people to complete a variety of qualifications at Key Stage 4 including the PEarson CiDA and DiDA, GCSE Computer Science, Functional Skills ICT and the ASDAN Vocational Short Course.

Long Term overview of the topics that each class will study during each half term.			
	Key Stage 3	Year 10	Year 11
Autumn 1	Using and managing information	Creating Digital Graphics	Creating Digital Video
Autumn 2	Essential Digital Skills Creating and Editing		
Spring 1	Representation in Media	Computer Hardware and Software	The Online World
Spring 2	Communication		
Summer 1	Developing ideas and problem solving	Digital Portfolio	Review and Revision
Summer 2	Project		

Potential qualifications that can be achieved in this subject area:
        GCSE, BTEC, Cambridge National, ASDAN, Functional Skills, Entry Level Certificate

Class: Key Stage 3					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
LO 1 Be able to identify and select information and resources to meet personal and organizational needs. LO 2 Be able to evaluate researched information, adhering to procedures and copyright. LO 3 Be able to store information in line with an organisation's agreed procedures.

Identify appropriate search facilities to find relevant information. Identify the different types of search engines. | LO1: Creating and editing documents. LO2: Editing and enhancing digital media. LO3: Processing numerical data.

Apply layout and format features for documents. Identify the importance of adapting documents for a specific audience or purpose. Use images in documents. Create a newsletter style document. Select and modify images to suit a particular | LO 1 Be able to manage and promote their own digital reputation and online identity. LO 2 Be able to use social media and the internet to search opportunities and prepare applications for employment. LO 3 Be able to use technology to facilitate personal and professional learning and career progression.

Identify the impact social media can have on future employment prospects of self and others. | LO1: Communicati ng and Sharing

Appropriately use different modes of online communicati on. BSL Compare two types of electronic communicati on that you use. | LO1: Developing ideas and problem solving. Working to a briefe. Working on a budget. Explain how you ensure you stay safe online. Explain the importance of sharing ideas. | LO1: create a multimedia presentation using text, images and sound. In creating their pages, pupils are expected to be sensitive to the needs of their audience. |

Bookmarking information. Demonstrate that the information gathered is from reliable and credible sources. Understand the importance of producing quality information. Explain the importance of routine file housekeeping for efficient handling and retrieval of information. Explain organisational procedures for storing information.	purpose. Add and modify data within a spreadsheet.	Differentiate between real and online identities Explain the need to have separate identities for their personal life and professional/ work life. Demonstrate how to produce a personal traditional CV. Identify factors to research and plan for an interview using appropriate digital technology tools and social medi			

Class: Year 10					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2

Creating Digital Graphics:
● Pre-production skills - storyboarding - design process.
   ○ Describe the term 'pre-production'
   ○ Compare planning tools available for pre-production
   ○ Create pre-production planning materials
● Describe the two main types of digital graphics: raster and vector
● Name associated file formats for types of digital graphics
● Utilise open source software to create both types of digital graphics
● Identify the resources required for creating digital graphics
● Recognise the legislation regarding use of digital graphics
		Computer Hardware and Software:
		● Computer systems and mobile technologies
		   ○ Identify the aspects of a computer system and be able to explain their role in the functioning of the computer
		   ○ Examine the ways in which computers can link together to form a network
		● Computer input and output devices
		   ○ Understand the relationship between input and output, and how they are impacted by the user interface.
		● Storage devices and media
		   ○ Be aware of different types of storage device and
				Digital Portfolio:
				Basic project lifecycle
				Stages of the project lifecycle:
				● design (e.g. storyboards, structure chart, assets, software)
				● create/develop and test a product e.g. iterative cycle of development and feedback from test users
				● review (e.g. feedback from others).
				Digital portfolio structure
				Web pages, including:
				● home page with introduction and links to sections
				● section pages to introduce purpose of section and link to context pages
				● context pages to introduce and link to items of content.
				Digital portfolio user interface
				Interface to include:
				● page formatting – colour scheme, fonts
				● assets required for web pages – (e.g. images, sound, video)
				● navigation – navigation bar, links (internal, text, graphical, buttons), consistency.
				Digital portfolio content
				Consider:	

	their uses / limitations
	● Communications
	   ○ Understand and identify / create a range of digital communications (Letter / email)
	● Working with information to solve problem
	   ○ Use of Block Code
	   ○ Real work computing using LEGO Mindstorms to overcome the problem.
		● selection – variety of extracts, snapshot of experiences and projects
		● file formats
		● compression
		● accessibility.

Class: Year 11					
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Creating Digital Video: ● Pre-production skills - storyboarding - scripting etc. 　○ Describe the term 'pre-production' 　○ Compare planning tools available for pre-production 　○ Create pre-production planning materials ● Name the different camera angles used in video production ● Recognise different file formats and properties of digital video ● Utilise the software required for digital video creation ● Creating a set / set design ● Marketing a video product.		The Online World: Online services Understand how and why online services can be used. Examples of online services, include: ● communication (email, instant messaging, newsgroups, social networking, online conferencing, blogs, chat room) ● real-time information (train timetables, news services, traffic reports, flight status updates, weather) ● commerce (internet banking, online auction websites, retail sales, publishing) ● government (online tax returns, e-voting, applications for services/grants, revenue collection) ● education (online learning/training) ● virtual learning environments (VLEs) ● business (video conferencing, collaborative working, business networks) ● entertainment (multi-user games, radio players) ● download services (music, film, upgrades, software).		Revision and FS Exams	

	Understand: ● the features of online advertising designed to capture attention and retain interest ● the affiliate model of pay-per-click direction of traffic to websites ● the services provided for online data storage including data backup, file access and file sharing. Online documents Understand online document systems, including: ● the need to compress (.zip) files for download/upload ● how files are compressed and expanded ● the advantages of using online software to create documents, including collaborative working, sharing documents and automatic backup ● comparing the use of online software with standalone software for the creation of documents ● the need for version control, levels of access and file permissions,		