ARAB UNITY SCHOOL

CURRICULUM OVERVIEW

ICT

YEAR 10

2021 – 2022

A guide for Parents and Students

Overview of the year:

The Cambridge IGCSE curriculum for ICT aims to ensure that all pupils:

- Develop knowledge of ICT including new and emerging technologies.

- Develop autonomous and discerning use of ICT

- Develop skills to enhance work produced in a range of contexts

- Develop skills to analyses, design, implement, test and evaluate ICT systems

- Develop skills to consider the impact of current and new technologies on methods of working in the outside world and on social, economic, ethical and moral issues

- ICT-based solutions to solve problems

- The ability to recognize potential risks when using ICT, and use safe, secure and responsible practice.

Term	Topic	Activities / Assessments	Skills (SECRET)
TERM ONE	**Theory** **Storage devices and media** • Backing up of Data • Types of Access • Secondary Storage Media **Networks and its Effects of using them** • Networks • Networks issues and Communication • Cloud Computing • Network Environments • Anti-malware software	**1.** Research and Investigate about the different hardware needed to set up a small network. Write an article on the topic with the relevance of each device. Mention what sort of connection – Wi-Fi, Bluetooth or cable will be chosen and why?	Being an **effective organizer**, student will get a chance to **reflect** their understanding about the topic "network devices"

	Practical **Data Manipulation** • Create a database structure • Manipulate data • Present data **Presentation Authoring** • What is a presentation? • Open a source file • Use a master slide to place objects • Create presentation slides • Display a presentation	**2.** Develop a report for a company for recording their stock details. Items are reordered when below a minimum stock level and the Reorder quantity is used to place the order.	The task will help the student to adapt the role of a **self-manager** and demands their effort to **enquire** about the scenario for creating a better data model
TERM TWO	**Theory** **Safety and Security** • Describe common physical safety issues, what causes them and some simple strategies for preventing these issues. • Explain personal data and why e-safety is needed. • Evaluate own use of the internet, email, social media/networking sites and online games and use strategies to minimize the potential dangers.To know	**1.** A system analyst has been asked to design an ICT system for a football supporters club. • Research the two ways the system analyst could find out what the ICT system will need to do. • Supporters will apply to join the club by entering their details into web page. Design a suitable screen input form that a supporter could use to input their details.	The task will help the student to incorporate their **creative thoughts** for the system implementation as a **team work.**

	effective security of data. **System life Cycle** • Analysis • Design • Development and testing • Implementation • Documentation & Evaluation **Practical** **Data Analysis (MS-Excel)** • What is a data model? • Create a data model • Test the data model • Manipulate data • Present data **Proofing** • Software tools • Proofing techniques **Graphs and charts** • Chart types • Create a chart • Label a chart • Use secondary axes	• When the ICT system has been designed, it is developed and tested. Describe what is meant by testing with types of test data. 2. Develop an invoice to send to a customer of your company. Make sure formula will work if the data changes. Invoice should show number of item, total number of units, total cost, subtotal for each of the item etc.	As a **reflection** of their knowledge, student will be able to **organize** the data effectively.
	Theory **AUDIENCES** • Audience Appreciation • Legal, Moral, Ethical and Cultural Appreciation	1. Investigate on the effects of IT in banking industry (e.g. ATM, Internet banking, EFT or EFTPOS) or in Schools (e.g. Library, Student registration). Find out the processing happens	The task demands the scenario of **enquiring** more on the topic to make them **reflective learners.**

TERM THREE	**ICT Applications** • Communication Applications • School Management System • Booking System • Banking Applications • Computers in Libraries • Computers in the Retail Industry	on the background. Discuss on how it affects employment. Discuss about the security concerns aligned with	
	Practical **Website Authoring** • Web development layers • Create a web page • Use stylesheets **Images**	**2.** You need to do independent research using technology to create a website containing the heading "Winter Sports", a brief introduction and unordered list of the following winter sports (skiing, tobogganing, and snowboarding. For each winter sport make a separate webpage with information, links, images.	The task will help the student to incorporate their creative thoughts and enquiries for designing a webpage.