

The Weald School - KS5 Computer Science



University

Apprenticeship

Employment

Reverse Polish Notation

Unit 9: Regular Languages

Mealy Machines

Sets

Regular Expressions

Backus-Naur Form

Searching and Sorting

Big O Notation

Graph Traversal Algorithms

Optimisation Algorithms

Limits of Computation

The Turing Machine

Recursive Algorithms

Unit 10: The Internet

IP Addresses

Internet Security

Structure of the Internet

Vectors

Unit 8 Algorithms

Client Server Model

TCP/IP

Packet Switching and Routers

Trees

Client Server Peer to Peer

Communication and privacy

Entity relationship modelling

Relational Database and Normalisation

Graphs

Hash Tables

Unit 6 Communication Technologies

Communication Methods

Unit 11: Database and Software

Unit 7: Data Structures

Queues

Stacks

YEAR 13

Network Topology

Wireless Networking CSMA SSID

The challenges of the digital age

Update Tables using SQL

Lists

Assembly Language

The processor

Internal Hardware

Functional Application

Functional Programming

Inheritance, Encapsulation and Polymorphism

Basics of OOP

Secondary Storage Devices

Input / Output

The processor instruction set

Unit 5: Computer Organisation and Architecture

Lists in Functional Programming

Unit 12: OOP and Functional Programming

Boolean Algebra

Programming Basics

Selection

Arrays

Subroutines

Hardware and Software

Role of Operating System

Programming Language Classification

Logic Gates

Unit 1: Programming Fundamentals

Finite State Machines

Testing and evaluation

Writing and interpreting algorithms

Solving Logical Problems

Unit 2 Problem Solving

Sound

Graphics

Bits, Bytes and Binary

Unit 3 Data Representation

YEAR 12



Abstraction and Automation

Structured Programming

Compression and Encryption

Binary Arithmetic

Number Systems

welcome