

## Computer Science GCSE 2022 – Topics and Revision

### Paper 1

<b>Topic 1 – Computational Thinking</b>
Decomposition and Abstraction, Flowcharts, 1D data structures, Trace Tables, Linear Search
<b>Topic 2 - Data</b>
2s Compliment, Binary, Overflow, Hexadecimal, ASCII, Bitmap Images, Calculate File Sizes, Compression (lossy, lossless)
<b>Topic 3 - Computers</b>
Stored Program Concept, Secondary Storage, Embedded Systems, OS User Management, Robust Software, HL & LL Languages
<b>Topic 4 – Networks</b>
LAN, WAN, IP Addressing, Speeds, Latency, POP3, SMTP, IMAP, TCP/IP model, Star topography
<b>Topic 5 – Issues and Impact</b>
Personal Data (Consent, Protection) , Algorithmic bias, Backup and Recovery of digital systems and data.

### Revision

*All materials are available and linked through Google Classroom*

Revision Videos

<https://student.craigndave.org/gcse-edexcel-videos>

### Paper 2

No reduction in Python content.

Programming / Python Practise

<https://www.codemarker.uk/users/login>

<https://www.101computing.net/category/python-challenges/>