



Computer Science Learning Journey

Training Employment Further Education

FUTURE

FURTHER EDUCATION

AS/A Level
Computer Science

Application & Web
Development Level
3

Networking &
Systems Support
Level 3

Information
Technology Level 3

Advanced Technical
in Digital
Technologies

CAREERS

IT Consultant

Cyber Security
Analyst

Information
Systems Manager

Database
administrator

Programmer

Systems
Administrator

IT Manager

Network Engineer

Data Analyst

Web Designer

Web Developer

Software Engineer

Application
Developer

WIDER READING

Problem solving
with flowcharts and
programming with
Python

[www.code
academy.org](http://www.codeacademy.org)

New GCSE
Computer Science
OCR Exam Practice
Workbook for
exams in 2022 and
beyond

New GCSE
Computer Science
OCR Revision
Guide for exams in
2022 and beyond

Craig 'n' Dave
YouTube Computer
Science Channel

Computeractive

PC Pro

Final exams

Unit 1 and Unit 2 Revision
and Programming Practice

File handling, search and
sorted algorithms and
Testing

Defensive design and
programming practice

Unit 1 and Unit 2 Revision
and Programming Practice

Legal, cultural, environmental
and privacy issues,
programming practice

**Year
II**

Network Protocols, SQL &
Data Structures, Network
Threats and Security and Arrays

Network Hardware, Network types
and Models, Subprograms, The Internet
and Network Topologies

The CPU, String Manipulation,
Embedded Systems and
Selection

Main Memory, Counter-
Controlled Loops and Secondary
Storage

System Software, Utility
Software and Condition
Controlled Loops

Boolean Logic, Programming
Fundamentals and Data
representation

**Year
10**

Creative
Digital Project

Algorithms &
Problem Solving

Programming with
Python (Extended)

AI, Data Science
& Ethics

Computer
Systems

**Year
9**

Databases &
Quality of data

Networks &
Cyber Security

Python
Programming
(Foundations)

Digital
Images

Data
Representation

**Year
8**

Programming
with Scratch

How computers
work

Computational
Thinking

Data Modelling
with spreadsheets

Digital Citizenship
& AI Foundations

**Year
7**

TRANSITION