

Lightcliffe Academy

Curriculum Overview

Computing & ICT



Year 7...

Autumn 1

Online Safety and
Cloud computing

Autumn 2

Hardware and
Software

Spring 1

Programming
Scratch (and
Robots)

Spring 2

History of
Computers

Summer 1

Practical
Programming -
Microbit

Summer 2

Spreadsheet Basics

Year 8...

Autumn 1

Computational
Thinking

Autumn 2

Build a Paper
Computer

Spring 1

Networks

Spring 2

Lego Robotics

Summer 1

Digital Marketing -
Vector Images

Summer 2

Programming -
Python

Year 9...

All Year 9

Artificial Intelligence and Programming (computer science)
Or
Advanced Spreadsheet Modelling (BTEC DIT)

Year 10 (computer science)...

Autumn 1

Data representation

Autumn 2

Boolean Logic

Spring 1

Memory & storage

Spring 2

Systems
architecture

Summer 1

Computer
Networks,
connections, and
protocols

Summer 2

System software

Year 11 (computer science)...

Autumn 1

Ethical, legal,
cultural impacts

Autumn 2

Algorithms

Spring 1

Programming
fundamentals

Spring 2

Producing robust
programs

Summer 1

Programming
languages and IDEs

Summer 2

Revision &
Examinations

Year 10 (BTEC DIT)...

Autumn 1

User Interface
Design Principles

Autumn 2

Project Planning
Tools

Spring 1

Develop and review
an interactive user
interface for a given
client

Spring 2

Investigate the role
and impact of using
data on
individuals and
organisations

Summer 1

Data Modelling
Skills

Summer 2

Ways to effectively
present data

Year 11 (BTEC DIT)...

Autumn 1

Different
communication
technologies

Autumn 2

Cloud collaboration
and computing

Spring 1

Why computer
systems are
attacked and ways
to prevent

Spring 2

Restricting user
access and
protecting data

Summer 1

Forms of notation

Summer 2

Revision &
Examinations