



Information Technologies



Archdiocese of Liverpool

Curriculum intent:

The Computer Science Department intends to equip all pupils to use computational thinking and creativity when understanding the modern world. We understand that Computer Science has deep links to Mathematics, Science and Design and Technology. We aim to build on this and teach the principles of Information and Computation.

We equip pupils to use Information Technology to create programs, systems and a range of content. Computing ensures that pupils become digitally literate at a level suitable for the future workplace and as active participants in a digital world.

Year 11

TERM 1

Content

Understanding planning tools

In this unit pupils will study tools & techniques that are used to initiate & plan solutions.

Storing & collecting data and information

This unit focuses on how data & information can be collected, stored & used.

Concepts and Skills

- The project life-cycle, interaction & iteration.
- Inputs & outputs, project considerations.
- Planning tools & software types.

- The differences between data & information.
- Collection & storage methods.
- Appropriateness of information to be shared.
- The interaction of data.

TERM 2

Threats to data

This unit analyses the factors to be considered when collecting, processing & storing data.

Processing & presenting information and data

This unit focuses on the methods by which data is processed and presented to specific audiences.

- Types of threats & vulnerabilities.
- Impacts/consequences of a cyber-attacks.
- Prevention measures, legislation, validity, reliability & bias.

- Appropriateness of software & presentation methods.
- Distribution channels. Resources.

TERM 3

Revision.

This time will be used to go back over key concepts taught and target any areas of mis-conception/weakness.

- Use of past paper questions.
- Develop examination techniques.
- Production of revision mind maps.
- Development of revision techniques.
- Production of revision materials.

