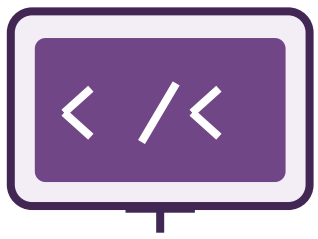
FURNESS ACADEMY

CURRICULUM OVERVIEW

COMPUTER SCIENCE

YEAR 11 | OCR GCSE J277



J277/01 | SYSTEMS & IMPACT

Networks and security, systems software and ethical, legal, cultural and environmental impacts.

J277/02 | ROBUST PROGRAMS

Develop programs using selection, iteration, subprograms, arrays and lists; test and debug.

J277/02 | LOGIC & TOOLS

Boolean logic, logic gates, translators, programming languages and development environments.

APPLYING KNOWLEDGE

Use computational thinking to analyse unfamiliar scenarios, evaluate solutions and explain technical concepts.

KEY SKILLS

Write, debug and refine programs • Use Boolean logic and data structures • Evaluate security and social impacts • Apply accurate technical terminology

PROGRESSION

Develop independence in algorithm design, programming and evaluation. Practical programming runs throughout the course; there is no coursework component.

ENRICHMENT & APPLICATION

Programming problems, testing and debugging tasks, and investigation of real-world cyber security and technology impacts.

FUTURE PATHWAYS

A-level Computer Science, Level 3 technical qualifications and careers in software, cyber security, networking and data science.