THE DEAN TRUST
Believe Achieve Succeed

Subject: GCSE in Computer Science	Year 10 and Year 11	
Examination Board: Edexcel Pearson	**Specification Code:** 601/8058/4	**Qualification:** GCSE
Director of Faculty: Miss L Fox	**KS4 Subject Lead:** Miss LFox	
Teaching Staff: Miss L Fox / Mr A Bott / Mrs J Peet		

Curriculum Rationale:
Key aspects of the qualification include; how computers work, making connections, data matters, computational thinking, practice and Python programming.

Paper 1 - Principles of Computer Science - (1hr 30 min Written Exam, 50%).
This component will introduce learners to the Central Processing Unit (CPU), computer memory and storage, wired and wireless networks, network topologies, system security and system software. It is expected that learners will become familiar with the impact of Computer Science in a global context through the study of the ethical, legal, cultural and environmental concerns associated with Computer Science.

paper 2 -Application of Computational Thinking - (Exam 50% on screen practical programming exam).
This unit encourages pupils to apply knowledge and understanding using computational thinking. Pupils will be introduced to algorithms and programming, learning about programming techniques, how to produce robust programmes, computational logic, translators and facilities of computing languages and data representation. Pupils will learn how to design,read,write and debug programs. Throughout the 2-year course able pupils will apply their skills to solve real problems and produce readable, robust programs.

Yr 10 Term 1 - Course Content: Algorithms Introduction to Python	**Yr 10 Term 2 - Course Content:** Data representation. Section and Iteration in Python	**Yr 10 Term 3 - Course Content:** Computer systems Arrays in Python
Yr 11 Term 1 - Course Content: Networks Subprograms in Python	**Yr 11 Term 2 - Course Content:#** Bigger picture Paper 2 revisions	**Yr 11 Term 3 - Course Content:** Exam preparation

Assessment Overview:
- There will be half termly tests on each topic area.
- Practise on screen tests
- An end of year mock exam

Homework and Revision Guidance:
All homework is set inline with the schools homework policy for KS4 pupils. Pupils complete their homework using Google Classroom. All homework will be set using these systems and pupils can access it at home with their appropriate log in details.

Learning and Career Pathways:
With a GCSE in Computers Science you can go onto study A-level Computers Science a range of vocational level 3 qualification or apprenticeships. This can also lead to a range of possible career paths including: IT consultant; Cybersecurity consultant; Information systems manager; Database administrator; Multimedia programmer; Systems analyst; Games developer.