Overview of Bridging Course

Department: Computer Science	

What is the focus of this bridging course?
- Refresh core programming skills developed in GCSE
- Investigate larger programs and investigate the use of modularisation
- Practice problem solving using core programming skills
- Develop basic understanding of HTML/CSS/JavaScript in the construction of webpages

w/b 27 April	*Overview of what students will cover this week:* • Investigate the use of IDEs, comparing IDEs • Investigation of a modularised program, Battleships, and be able to identify components and structures within this • Review basic programming elements such as input, output and variables to extend the functionality of a program • Write validation routines for the given program to ensure that unacceptable inputs are rejected
w/b 4 May	• Investigation of how programs can be modularised. Identifying the differences between and knowing when it is appropriate to use procedures, functions and user-defined libraries. • Planning your code – Pseudocode to program code • Writing new subroutines to extend the functionality of the Battleships program
w/b 11 May	• Recap on algorithms and the importance of efficiency • Looking for patterns in a problem and structure selection • Use programming skills to solve a series of problems by coding algorithms in an efficient manner
w/b 18 May	• Students undertake a short course on the basics of HTML • HTML basic elements • Layout elements such a Table and Div tags • Using Styles • Creating Forms • Use of CSS/JavaScript

Work that will students will receive feedback on:

- The problem solving tasks from Week 3 will be submitted on return to school in September and feedback will be given on these