Whitworth Community High School
Computer Science Department

Teacher in Charge/Faculty Leader: Mr B Hanif	**Year 9, 10 & 11 Learning Overview**
Organisation of the classes: GCSE Computer Science is an optional subject that can be taken from Year 9. Students will have 2 hours per week in Year 9, 10 and 11.	
Key Concepts: GCSE Computer Science is a vital introduction to software engineering. students who would like to develop apps for computers/mobile phones as well as working in the games and entertainment industry as programmers, will find this course extremely interesting.	**What skills do I use in this subject?** Time management, ensuring work is completed before the hand-in deadlines. Learning new software. Being creative with software. Using logic to complete programs.
What will you be learning? Students will understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation. They will analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs. Also students will think creatively, innovatively, analytically, logically and critically.	**How will you be learning?** Independent research with accompanying tasks. Question and answer sessions. Whole class and small group discussions. Analysing how computer systems have developed.
How will your learning be assessed? Over the course of the 3 academic years, students will be assessed both using formative and summative methods including examinations and projects.	**Home Learning:** Students will get a home learning task to do once every 2 weeks. This will be handed in and assessed with a maximum of 1 week turnaround in order for the student to act on any feedback and make the necessary changes.
Equipment needed? Students would benefit from having a laptop and access to the internet.	**How can your parents support your learning?** Parents can help to ensure that students are handing in assignments on time and to the best of their ability. They can encourage the participation of extra programming tasks and the revision of topics covered in lessons in order to help secure knowledge.
SMSC Links – Focus on Aspirations: Throughout the course students will be given an insight into the variety of professions Computer Science is required for. They will also be shown examples of technological products that rely on Computer Science.	**What extracurricular activities or enrichment opportunities are available?** During open days and evenings, students will be required to act as ambassadors for the subject. They will be required to speak to both potential students and parents, giving them an insight into the subject. There will be an after school coding club that all students can join. When entering local and national competitions, students will be invited to participate in groups against other schools.