GREATER PETERBOROUGH UTC

Curriculum Intent, Implementation and Impact

Computer Science

Subject Rationale and Intent

The IT and Computer Science curriculum is designed to be accessible to all abilities while stretching every student. Key Stage 3 schemes of work align to the NCCE framework, with a particular focus on the iBelong guidelines to support female progression into computing, and develop computational thinking beyond Computer Science alone. At Key Stage 4, GCSE Computer Science (1-9) offers an accessible qualification for all abilities, while Key Stage 4 and Key Stage 5 teaching maintains a strong focus on the practical application of course content and access to devices.

Physical computing is encouraged through Lego coding, Vex robotics, Arduino and Raspberry Pi platforms, and students can extend their learning through Minecraft Club, the FXP Coding Club and a break-time Scratch coding drop-in, nurturing responsible use of technology alongside technical skill. As in other subjects, business partners co-design term-based projects that are embedded within schemes of work and launched by industry professionals.

Students take a range of pathways through Key Stage 5, supported by a careers programme that helps them understand routes into the workforce, including the application of computing and computational thinking across STEM career pathways more broadly.

The intended impact is a curriculum that keeps STEM and computational thinking at the forefront of students' experience, supports genuine progression for students of all backgrounds and abilities, including under-represented groups in computing, and connects classroom learning clearly to future study and employment.

YEAR 7	Curriculum Content	Assessment Criteria	Parent Support
Term 1	Schemes of work aligned to the NCCE Teach Computing framework, with a focus on the iBelong guidelines to support female progression, plus physical computing (Lego coding, Vex robotics, Arduino, Raspberry Pi) and enrichment clubs (Minecraft Club, FXP Coding Club, Scratch drop-in).	Teacher-assessed through practical programming tasks and project outcomes. There is no external examination at Key Stage 3.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
Term 2	Schemes of work aligned to the NCCE Teach Computing framework, with a focus on the iBelong guidelines to support female progression, plus physical computing (Lego coding, Vex robotics, Arduino, Raspberry Pi) and enrichment clubs (Minecraft Club, FXP Coding Club, Scratch drop-in).	Teacher-assessed through practical programming tasks and project outcomes. There is no external examination at Key Stage 3.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
Term 3	Schemes of work aligned to the NCCE Teach Computing framework, with a	Teacher-assessed through practical	OCR GCSE Computer Science subject pages

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Term 2	Schemes of work aligned to the NCCE Teach Computing framework, with a focus on the iBelong guidelines to support female progression, plus physical computing (Lego coding, Vex robotics, Arduino, Raspberry Pi) and enrichment clubs (Minecraft Club, FXP Coding Club, Scratch drop-in).	Teacher-assessed through practical programming tasks and project outcomes. There is no external examination at Key Stage 3.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
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Term 2	Schemes of work aligned to the NCCE Teach Computing framework, with a focus on the iBelong guidelines to support female progression, plus physical computing (Lego coding, Vex robotics, Arduino, Raspberry Pi) and enrichment clubs (Minecraft Club, FXP Coding Club, Scratch drop-in).	Teacher-assessed through practical programming tasks and project outcomes. There is no external examination at Key Stage 3.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
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YEAR 10	Curriculum Content	Assessment Criteria	Parent Support
Term 1	OCR GCSE (9-1) Computer Science, covering computer systems, computational thinking, algorithms and programming, with a strong emphasis on practical programming.	Two equally-weighted written exams (Computer Systems; Computational Thinking, Algorithms and Programming), 80 marks each, assessed against Ofqual's Computer Science assessment objectives. There is no separate non-exam assessment component.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
Term 2	OCR GCSE (9-1) Computer Science, covering computer systems, computational thinking, algorithms and programming, with a strong emphasis on practical programming.	Two equally-weighted written exams (Computer Systems; Computational Thinking, Algorithms and Programming), 80 marks each, assessed against Ofqual's Computer Science assessment objectives. There is no separate non-exam assessment component.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
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Term 2	OCR GCSE (9-1) Computer Science, covering computer systems, computational thinking, algorithms and programming, with a strong emphasis on practical programming.	Two equally-weighted written exams (Computer Systems; Computational Thinking, Algorithms and Programming), 80 marks each, assessed against Ofqual's Computer Science assessment objectives. There is no separate non-exam assessment component.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
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YEAR 12	Curriculum Content	Assessment Criteria	Parent Support
Term 1	A range of pathways applying computing and computational thinking across STEM careers, building on GCSE Computer Science.	Assessment routes depend on the qualification chosen and will be confirmed with students as Key Stage 5 options are finalised.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
Term 2	A range of pathways applying computing and computational thinking across STEM careers, building on GCSE Computer Science.	Assessment routes depend on the qualification chosen and will be confirmed with students as Key Stage 5 options are finalised.	OCR GCSE Computer Science subject pages BBC Bitesize: Computer Science NCCE Teach Computing resources
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