ICT & Computing
Qualifications & Pathways

BCHS with Crosshill

Course Title	**Computer Science (9-1) (J276)**
Exam Board	OCR http://ocr.org.uk/qualifications/gcse-computer-science-j276-from-2016/
GCSE Equivalent	1 x GCSE A*-C
Assessment Breakdown	**Exam 01:** Written paper (1 hour and 30 minutes - no calculators allowed). 40% of mark. **Exam 02:** Written paper (1 hour and 30 minutes - no calculators allowed). 40% of mark. **Controlled Assessment:** Non Exam Assessment (20 hours). 20% of mark.
Course Outline	**Exam (01): Computer systems:** Systems Architecture; Memory, Storage; Wired and wireless networks; Network topologies, protocols and layers; System security; System software; Ethical, legal, cultural and environmental concerns. **Exam (02): Computational thinking, algorithms and programming:** Algorithms; Programming techniques; Producing robust programs; Computational logic; Translators and facilities of languages; Data representation. **Controlled Assessment (03): Programming Project:** Programming techniques; Analysis; Design; Development; Testing, evaluation and conclusions.
Progression Routes to Further Education/ Training	There is a greater emphasis on 'computational thinking' which encourages mental versatility. Students can use their new-found programming skills on an independent coding project by solving a real-world problem of their choice. The specification challenges and inspires students to further study and to pioneer the use of digital technologies following a related career path.
Progression Routes to Employment	Consultations with organisations such as; Microsoft, Google, Cisco, Codio and Computing at School (CAS) have produced a Computer Science qualification that is both engaging and contemporary. There is a focus on cyber security and you will examine phishing, malware, firewalls, and for the first time at this level, people as the 'weak point' in secure systems.

Course Title	**Level 1/2 Cambridge National Certificate in Enterprise and Marketing 603/0646/4 J819**
Exam Board	OCR http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-nationals-enterprise-and-marketing-level-1-and-2-certificate-j819/
GCSE Equivalent	1 x GCSE A*-C
Assessment Breakdown	2 x controlled assessments (30glh each) 1 x written exam (1 hour 30mins, 60glh)

Course Outline	**R064: Enterprise and marketing concepts:** Written paper has two parts and students study how and why customer segmentation is used and how to target a customer market; How to attract and retain customers; Techniques to use when developing products and how to investigate what makes a product viable. **R065: Design a business proposal:** Students study how to design a product proposal to meet a business challenge scenario; To identify a customer profile for their own product design; Know how to develop market research tools and use these to complete market research for their product; Financial calculations to select a pricing strategy and determine whether their proposal is viable. **R066: Market and pitch a business proposal:** Students study how to pitch their product proposal to an external audience and complete a review of both their pitching skills and product proposal; How to use a combination of branding and promotional methods that complement each other and appeal to a specific customer profile; Development of transferable skills i.e. presenting information to others in a clear and persuasive manner.
Progression Routes to Further Education/ Training	This qualification is designed with both practical and theoretical elements, which will prepare students for further study of Level 3 and/or A level related subjects in enterprise, marketing or business.
Progression Routes to Employment	An aspiration for many young people is to be self -employed and start their own business. The course has engaging content, with practical learning, allowing students to develop their business acumen and enterprising skills in order to make informed decisions about their futures.

Course Title	**TLM Level 1 Certificate in Open Systems and Enterprise (601/4559/6)**
Exam Board	TLM https://thelearningmachine.co.uk/tlm-l1l2-user-skills-open-systems-enterprise/
GCSE Equivalent	1 x GCSE A*-C
Assessment Breakdown	Centre assessed/externally moderated 5 components (all mandatory units) 1 Exam E- Assessment, Level 1 graded Pass/Merit/Distinction/Distinction* (level 1=16 credits)
Course Outline	**Unit 1: Improving Productivity using IT:** Plan select and use appropriate IT systems and software to meet needs. Review and adapt the ongoing use of IT tools and systems to make sure that activities are successful. Develop and test solutions to improve the ongoing use of IT tools and systems. **Unit 4: IT Security for Users:** Select and use appropriate methods to minimise security risk to IT systems and data. How to keep information and access to systems secure. Ways to protect hardware, software, data and to minimise risk. How to back-up data and follow guidelines and procedures. **Unit 15: Digital Design and Graphics:** Obtain, insert and combine information for images. Select appropriate tools/techniques to edit and manipulate images. Use imaging software tools to create, manipulate and edit images. Identify constraints of image use including working with different file formats. **Unit 10: Digital Editing and Publishing:** Input and combine text and other information within presentation slides. Use presentation tools to structure, edit and format information sequences. Prepare information for publication. Use different forms of media to enhance publications to meet the needs of a client. **Unit 17: Digital Modelling:** Use a modelling application to edit and organise data. Use appropriate tools, methods and feedback to build a model. Use IT tools to present a model to an audience. **E-Assessment:** Following successful completion/moderation of all centre assessed tasks, students will complete an online exam to determine final grading.

Progression Routes to Further Education/ Training	Students learn how to use common IT tools efficiently, safely and effectively; Demonstrate competence in generic principles that can transfer between contexts. Increasingly higher level study depends on digital skills whether it is to publish work, search for information or re-use other people's work. IT literacy and understanding is crucial for further study in any digital technologies subject.
Progression Routes to Employment	This qualification provides skills and knowledge that are essential in the workplace.

Course Title	**Cambridge National Certificate Level 2 in Creative iMedia (J817)**
Exam Board	OCR http://www.ocr.org.uk/qualifications/creative-imedia-level-1-2-award-certificate-j807-j817/
GCSE Equivalent	1 x GCSE equivalent A* - C
Assessment Breakdown	4 Components: 3 x centre assessed tasks and 1 x exam all 25% of final mark. **Unit R081:** Exam - written paper (1hour 15mins, 30glh) **Unit R082:** Controlled Assessment (10 hours, 30glh) **Unit R087:** Controlled Assessment (10 hours, 30glh) **Unit R089:** Controlled Assessment (10 hours, 30glh)
Course Outline	**R081: Pre-production Skills:** Students study the purpose and content of pre-production (uses of mood boards, mind maps, visualisation diagrams, storyboards, scripts); Planning pre-production; Produce pre-production documents; Review and identify areas of improvement for pre-production documents (format, clarity, content). **R082: Creating Digital Graphics:** Students study the purpose and properties of digital graphics; Planning the creation of a digital graphic based on a specific brief; Creation of a digital graphics (assets, technical compatibility, range of image editing software tools/ techniques, export, version control); Review and identify areas of improvement for a digital graphic. **R087: Creating Interactive Multimedia Products:** Students study the uses and properties of interactive multimedia products (e.g. websites, information kiosks, mobile phone apps, e-learning products); Planning and legislation; Creation of interactive products to meet client requirements; Review interactive products, identify areas for further improvement and development. **R087: Creating a digital video sequence:** Students study the uses and properties of digital video; Planning and legislation; Creation of digital video to meet client requirements; Usability testing during production and post-completion.
Progression Routes to Further Education/ Training	Learners can progress to vocational qualifications: IT User Skills, IT Professional and IT Practitioner suite of qualifications and Creative iMedia level 3 suite of qualifications.
Progression Routes to Employment	This course encourages independence and on successful completion employability will be enhanced. This qualification provides a strong foundation for careers in the media sector.

How can parents support ICT & Computing?
- Ensure your child has a reliable Internet connection and appropriate device with which to complete their work at home
- Ask your child to show you their work via Citrix network connection and/or the school VLE
- All KS4 students are provided with a text book and other printed materials to assist independent learning; please help your child to organise their time
- Please feel free to contact Mrs Sillitoe (Director of Learning ICT & Computing) regarding any aspect of your child's learning