

ICT & Computing Qualifications & Pathways



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	IT User Skills in Open Systems and Enterprise (600/6688/X)
Exam Board	TLM https://thelearningmachine.co.uk/level-2-it-user-skills-technical-award/
GCSE Equivalent	1 x GCSE A*-C
Assessment Breakdown	Centre assessed/externally moderated 5 components (2 mandatory units) 1 Exam E- Assessment, Level 1/2 graded A*- G (level 2=17 credits)

Course Outline	<p>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.</p> <p>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.</p> <p>Unit 15: Imaging Software: 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.</p> <p>Unit 10: Presentation Software: Input and combine text and other information within presentation slides. Use presentation software tools to structure, edit and format slide sequences. Prepare a slideshow for presentation. Enhance a presentation to meet the needs of a client.</p> <p>Unit 17: Video Software: Use video software tools and techniques to combine and edit sequences. Use video hardware and software to capture sequences. Play and present video.</p> <p>E-Assessment: Following successful completion/moderation of all centre assessed tasks, students will complete an online exam to determine final grading.</p>
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	Certificate in Open Platforms and Digital Skills (603/1204/X)
Exam Board	TLM https://thelearningmachine.co.uk/certificate-open-platforms-digital-skills/
GCSE Equivalent	1 x GCSE A*-C
Assessment Breakdown	Centre assessed/externally moderated: 4 mandatory components submitted as one digital portfolio (40%), 1 Exam E- Assessment (60%)
Course Outline	<p>TLM 1: The understanding of digital platforms and open standards: Understand the structure and properties of digital material. Plan, design and use digital information in appropriate ways. Analyse and evaluate the control of digital information.</p> <p>TLM 2: The management of digital platforms and the application of digital skills: Understand the way digital information is managed and modified. Plan, create and manage different digital material as required. Assess the strengths and weaknesses of digital material management and systems.</p> <p>TLM 3: The evolution of threats to digital platforms and the skills required to counter these threats: Understand the different risks associated with online digital material. Plan, create and deploy systems and processes to minimise threats. Analyse and apply tools and systems to minimise threats to digital material.</p> <p>TLM 4: Extended Project: Planning, executing and evaluating systems to promote a learner's digital skills in a contemporary and accessible way. Understand what is required of a digital profile to promote my knowledge and skills to different audiences in a secure manner. Plan a secure working digital profile to promote my skills and understanding in a secure manner. Create a secure working digital profile to promote skills and understanding in a secure manner. Create a test regime to ensure the security and effectiveness. Analyse and assess the security and effectiveness of profile input.</p> <p>E-Assessment: Following successful completion of the digital portfolio/moderation of all centre assessed units, students will complete an online exam to determine final grading.</p>

Progression Routes to Further Education/ Training	The course is broad ranging covering all aspects of digital technology. The programme develops an appreciation of the difference between data and information and the power of the digital world. The practical units showcase a true 'can do' capability in recruitment to level 3 courses or to an advanced apprenticeship programme.
Progression Routes to Employment	Students who wish to pursue a career or further study in information and communication technology will benefit from the skills and understanding on offer. The qualification underpins all aspects of digital competence in any career or path of study.

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	<p>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).</p> <p>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.</p> <p>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.</p> <p>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.</p>
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.

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	<p>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.</p> <p>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.</p> <p>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.</p>
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.

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