

A Level ICT

Exams Offered: OCR AS/A2 ICT (H117/H517)

Head of Department

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Department Learning and Teaching Policy and Practice

A qualification in ICT combines well with many subjects, including those that benefit from an ability to obtain, manipulate, present and communicate information. It also goes well with subjects that contain analytical, scientific and technological aspects. The aims of this A level are to encourage candidates to develop;

- The capacity to think creatively, innovatively, analytically, logically and critically
- The skills to work collaboratively
- The ability to apply skills, knowledge and understanding of ICT in a range of contexts to solve problems
- An understanding of the consequences of using ICT on individuals, organisations and society and of social, legal, ethical and other considerations on the use of ICT
- An awareness of emerging technologies and an appreciation of the potential impact these may have on individuals, organisations and society

Assessment Policy and Practice

Homestudy will be set at the end of each lesson. Students will be given a variety of tasks which will include exam questions, practical activities to demonstrate their ICT skills and worksheets. These will be marked by the teacher. In the case of exam questions, students will be given access to mark schemes to see how marks have been awarded. This will provide the opportunity for self and peer assessment.

In Year 13 students will be given tasks concerning coursework topics and will have the opportunity to self assess their own work before submitting coursework sections.

Master Learner Learning Journey (ICT)

Master Level Learner

As a master you will be the technical brain of the group. You will be the main point of information among your peers on how to resolve technical issues in applications. You and your subject will be inseparable. ICT is constantly used by you inside and outside of the school environment and you enjoy challenging yourself and taking risks in order to learn new skills and use new tools. You have a presence that others respond to. The difficulties of learning and the challenges in the subject offer you a necessity to find out more. You are a confident learner and relish learning more and will apply this outside of school also. You will accept failure in the same way you accept success and will not allow it to set you back, in fact it will make you more determined to find a solution to the problem via a different route. You accept doubt and uncertainty but are fascinated by what can happen if you trust your instincts.

Expert Learner Level

In order to be an expert learner in ICT you need to be recognised as an established member of the group who has a large skills base and are very knowledgeable in ICT. You need to be always fully prepared and be keen to explore new topics within ICT. Others should be inspired by you and you should encourage them to learn for themselves. You should relish new areas of challenge, especially within the structured tasks. You should aim to be a valuable information resource within the class and enjoy discovering new resources and learning techniques through First Class and other sources to help others.

Practitioner Learner Level

As a practitioner learner you will need to be more engaged with the ICT programme of study and be aware of what areas you have covered so far. You need to participate fully in dialogue and get involved in the discussions about topics that have been set up in First Class. You need to be fully prepared for lessons and as a result of this portray a confident attitude in the classroom. You need to be aware of your areas of strength and what areas to need to improve upon. You will need to plan accordingly and take control of your studies in particular, the skills required for practical tasks. You must endeavour to access formal and informal resources about ICT with skill especially in First Class.

Apprentice Learner Level

To be an apprentice learner in ICT you will engage with your studies in ICT and become more aware of the programme of study. You should aim to present your ideas on topics to others and engage in discussion more especially in First Class. You need to be aware that you have a lot to do in order to improve within ICT. You will realise you need to plan ahead and can do so with support. You will need to monitor your progression in ICT especially with the skills you are gaining to help you complete the structured tasks. You realise you need to plan ahead and engage in the support provided for you. You will need to be more productive when given access to resources that may be of use to you. You need to try to be seen as a good member of the group who is capable of functioning well when you set your mind to it.

Novice Learner Level

As a Novice learner in ICT you struggle in ICT especially with gaining the skills needed for the structured tasks. You find it hard to accept you are struggling and tend to try and hide this fact instead of talking to your teacher about it. You are unsure of where you are at in the programme of study and also how you should start to make progress. You don't plan in preparation for practical tasks. You will be reluctant to stress about your lack of progression in ICT. You should be aware that there are various steps you can take to start improving and of the resources available to you that will help you make progress. You will find it difficult to be fully engaged in lessons and will require prompting often to get back on task.

Year 12 Course Outline

Year 12 comprises two units G061 (Information, systems and applications) a theory unit which requires students to sit a 2 hour exam paper (externally assessed) and G062 (Structured ICT Tasks) which is a practical unit which requires pupils to carry out a set of tasks and provide evidence of what they have done which is internally assessed but externally moderated.

Autumn Term	Spring Term	Summer Term
<ul style="list-style-type: none">• Spreadsheet Concepts• Testing• Design• Software Development (Graphics Software + Creating Images)• Interface Design• Documentation• Database Concepts• Mail merge	<ul style="list-style-type: none">• Desktop Publishing• Relational Database Concepts• Creating Websites• Role and Impact of ICT• Data Information and Knowledge	<ul style="list-style-type: none">• Software and Hardware• Characteristics of standard applications• Bitmap and vector images• Graphics Libraries• Characteristics of Presentation Software• Revision of other topics studied throughout the Autumn and Spring terms.
Key Pieces of work <ul style="list-style-type: none">• Tasks 1,2 and 3 of Structured ICT Tasks	Key pieces of work <ul style="list-style-type: none">• Tasks 4, 5 and 6 of Structured ICT Tasks• G061 Mock Exam	Key pieces of work <ul style="list-style-type: none">• G061 Exam

Suggested Reading/Resources

OCR ICT for AS - Paul Long, Glen Milberry and Sonia Stuart
Dynamic Learning for AS ICT - which is a program on the school network.
All resources which are put into the G061 and G062 folders in First Class
www.teach-ict.com
www.techonthenet.com

Year 13 Course Outline

Year 13 comprises two units, G063 (ICT Systems, Applications and Implications) a theory unit (externally assessed) which requires students to sit a 2 hour exam paper and G064 (Coursework) which is a practical unit which requires students to solve a well-defined client-driven problem and produce a written report which is internally assessed but externally moderated.

Autumn Term	Spring Term	Summer Term
<p>An understanding of the systems life cycle (which will also cover in detail the skills required to carry out the first 2 sections of the coursework).</p> <p>Designing computer based information systems (which will allow students to be able to complete the design section of the coursework)</p>	<p>Implementing Computer-based information systems (which will aid students also in the written report for the coursework)</p> <p>Implications of ICT</p>	<p>At this point G064 will be completed and so students will focus on theory in preparation for the G063 exam</p> <ul style="list-style-type: none"> • Networks and communications • Applications of ICT
<p>Throughout the Autumn and Spring terms, students will spend a large % of time on the G064 coursework unit. They will be required to produce a written report to show for the well-defined client-driven problem that enables them to demonstrate their skills to:</p> <ul style="list-style-type: none"> • Analyse a problem; • Design a solution to the problem; • Develop the software solution; • Test the solution against the requirements specification; • Document the solution; • Evaluate the solution; • Work with others to successfully complete the above steps. 		<p>Revision of other topics studied throughout the Autumn and Spring terms.</p>
<p>Key Pieces of work</p> <ul style="list-style-type: none"> • G064 Coursework 	<p>Key pieces of work</p> <ul style="list-style-type: none"> • G064 Coursework • G063 Mock Exam • G061 Resit Exam from Yr 12 	<p>Key pieces of work</p> <ul style="list-style-type: none"> • G063 Exam

Suggested Reading/Resources

OCR ICT for A2 – Paul Long, Glen Milberry and Sonia Stuart

All resources which are put into the G063 and G064 folders in First Class

www.teach-ict.com

www.techonthenet.com

Useful Websites

www.teach-ict.com

www.fatmax.org

www.techonthenet.com

<http://www.geographypages.co.uk/ictkey5.htm>

http://www.thekjs.essex.sch.uk/yates/year_12.htm

Wider Learning Opportunities

Many lessons will have extension activities for more advanced students to complete in order to demonstrate their ability.

The ICT suites on both lower and upper sites are open during lunchtimes for students to avail of. Also during exam time, revision sessions will take place after school. Students will be made aware of a period each week which they can use to come and see their teacher for extra support if necessary.