

## **2016 – 2018: GCSE Information and Communication Technology (4520) AQA**

### **Unit 1 Systems and Applications in ICT**

(120 marks)

1 hour 30 minutes

40% of the marks

Externally assessed

Section A: 10 structured questions featuring a range of types of questions from very short to questions requiring 2 or 3 line answers. (72 marks)

Section B: 3 structured questions featuring short and extended answer questions. (36 marks)

All questions will be compulsory in Sections A and B.

Section C: 1 essay question from a choice of 2. (12 marks)

### **Unit 2 The Assignment: Applying ICT (100 marks)**

Approximately 25 hours of Controlled Assessment

30% of the marks

Internally assessed, externally moderated

The description of a situation will be provided by AQA each year. Within the given situation, and working independently, candidates will be asked to solve one or more tasks requiring independent use of ICT. A new Assignment will be provided every year by AQA. Candidates must submit the Assignment current for the year in which they enter for the exam.

### **Unit 3 Practical Problem Solving in ICT (100 marks)**

Approximately 25 hours of Controlled Assessment

30% of the marks

Internally assessed, externally moderated

The purpose of this unit is to ask candidates to solve practical problems which they may meet in education, the community or in the work place. ICT must be used to solve the problem. Each year six tasks will be provided by AQA. The centre can then choose which tasks to make available to its candidates. More than one task per teaching group can be used in each series.

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

<b>Autumn Term 1 – Sept 16</b>	
3.1.1 Computer systems and mobile technologies	
Mobile technologies (1)	
Hardware, Types of hardware and Software (.5)	Personal and commercial computer systems (.5)
Using computer systems (.5)	Identify ICT problems and solve errors (.5)
Emerging technologies (.5)	
3.1.2 Computer input and output devices	
Input devices (common and specialist) and know their advantages and disadvantages (.5)	Output devices (common and specialist) and know their advantages and disadvantages (.5)
3.1.3 Storage devices and media	
Types of memory, Backing/Secondary storage devices and media of different types & Impact of using storage devices (1)	
3.1.4 Communications and entertainment	
Communications networks (.5)	Communication devices and media (.5)
Network devices (.5)	Entertainment systems (.5)
Reliability of information (.5)	Impact of communications technology (.5)
3.2.1 Systems life cycle	
Systems life cycle stages (1)	
3.2.2 Working with information to solve problems	
Information and data (.5)	Finding, selecting and using information (.5)

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

Quality of information and/or data (1)	Data collection/capture methods (.5)
<b>Autumn Term 2 - Oct 16</b>	
3.2.2 Working with information to solve problems – cont.	
Reviewing and modifying work (.5)	
Presenting information in ways that are fit for purpose and audience (1)	
Sharing and exchanging information electronically (.5)	Evaluate the effectiveness of ICT tools to meet needs (.5)
3.2.3 Operating systems and user interfaces	
Operating Systems (.5)	
User interface (1)	
File/folder organisation (.5)	Encoding data (.5)
3.2.4 Applications software	
Use of applications software, Proprietary and open source software, Hosted applications (.5)	
Generic features of software (appearing as reasonably common features in most software packages) (.5)	
3.2.5 Word processing, DTP, web design and other presentation software	
Specific features of and differences between a word processor and DTP, A word processor and DTP, Use features of different software packages to organise and present information (1)	
Presentation software (1)	
Web design software (.5)	Software for audio, DVD and video players (.5)
Podcast (1)	
3.2.6 Graphics production and image manipulation	

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

Specific features of graphics manipulation software (.5)	
3.2.7 Spreadsheets and modelling software	
Types of data (Common to spreadsheets and databases) (.5)	
Specific features of a spreadsheet (.5)	Formulae and functions (.5)
<b>Spring Term 1 – Jan 17</b>	
3.2.7 Spreadsheets and modelling software – cont.	
Modelling (2)	
3.2.8 Databases	
Data structures (.5)	
Collect/enter data to a database (1)	
Specific features of a database (1.5)	
Everyday tasks for databases (1)	
Data redundancy (.5)	
Outputs (.5)	Mail merging (.5)
3.2.11 Data logging and control software	
Data logging (1)	
Controlling devices (1)	
Control-feedback loop (.5)	
<b>Spring Term 2 - Feb 17</b>	
<b>Controlled Assessment</b>	

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

Controlled Assessment Unit 2

Teaching and preparation

Teaching and preparation for Unit 2 (5)

Practice unit 2 (6)

Candidates start working through Unit 2

Candidates working through Unit 2 (1)

### **Summer Term 1 - April 17**

Unit 2

Candidates working through Unit 2 (12)

### **Summer Term 2 – April 17**

Unit 2

Candidates working through Unit 2 (12)

### **Autumn Term 1 – Sept 17**

3.3.1 Legal issues

Data Protection Act (2)

Computer Misuse Act (1)

Copyright law (.5)

Health and Safety issues at work (1)

3.3.2 Social and economic issues

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

Changing pattern of commerce and industry due to increased use of ICT (1)

Changing pattern of employment due to increased use of ICT (1)

Acceptable ICT use (.5)

Responsible behaviour online (.5)

Social and personal effects of ICT, Accessibility, Sustainability and recycling (1)

### 3.3.3 Political, ethical and environmental issues

Political and ethical issues (1)

Using ICT to monitor and minimise harmful effects on the environment (.5)

Impact of ICT on different peoples (.5)

### 3.4.1 Collaborative working

Collaboration, Collaborative working processes (.5)

Video/ teleconferencing, Collaborative situations and software (.5)

Sharing information and online safety, Advantages and disadvantages of collaborative home working (.5)

## Autumn Term 2 – Oct 17

Controlled Assessment Unit 3

Teaching and preparation

Teaching and preparation for Unit 3 (5)

Practice unit 3 (6)

Candidates start working through Unit 3

3.2.9 Web browsing and e-mail

## 2016 – 2018: GCSE Information and Communication Technology (4520) AQA

Web browser and search engine (.5)	E-mail (.5)
3.2.10 Web logs and social networking Web logs (.5)	Social networking software (.5)
<b>Spring Term 1 - Jan 18</b>	
Unit 3 Candidates working through Unit 3	
<b>Spring Term 2 – Feb 18</b>	
Written Exam Revision Candidates working through Unit 3	
<b>Summer Term 1- April 18</b>	
Written Exam Revision	
<b>Written exam May 18</b>	

### Websites

[www.mrplahe.com](http://www.mrplahe.com)

<http://www.bbc.co.uk/education/subjects/zqmtsbk>

<http://www.reviseict.co.uk/games/>

[http://www.teach-ict.com/gcse\\_new/gcse\\_ict\\_home.html](http://www.teach-ict.com/gcse_new/gcse_ict_home.html)