

ICT

OCR Level 3 Cambridge Technical Diploma in IT



Examination Board: OCR

Qualification Structure:

This qualification counts as two A-level equivalent qualifications, upon achieving this qualification students are awarded a double grade (Distinction – Distinction, for example). This Course is taught along side the Introductory Diploma, where they will be taught the 5 units that the qualifications share. The students who choose this qualification will also have timetabled lessons where they focus on the 6 additional coursework units that this qualification entails that separate the Diploma and Introductory Diploma qualifications.

Course content:

The Cambridge Technical qualifications offer opportunities to develop the skills demanded by employers in the UK today. These vocationally-related diplomas are included in the Qualifications and Credit Framework. Learners will have the opportunity to acquire essential knowledge and tools for the world of work, developing transferable skills such as planning, research and analysis, working with others and effective communication.

All learners will study the following units; Fundamentals of IT, Social media and digital marketing and Global Information, Cyber Security, Virtual and augmented reality, Project Management, Project Development, Smarter Planet, Internet of Everything, Mobile Technology and Computer System Hardware. These units provide learners with an insight into the IT sector, as they investigate the pace of technological change, IT infrastructure, how to build and maintain a computer system, how to plan and develop a product/service from concept to post launch and the flow of information on a global scale, as well as the important legal and security considerations.

Unit 1 Fundamentals of IT (exam 90GLH) 1 hour 30 minutes written paper

- Types of computer system
- Communications hardware
- Hardware troubleshooting
- Number systems and conversion
- Types of software
- Communication methods
- Software troubleshooting
- Protocols
- Virtualisation
- Communication skills and technology
- Personal attributes and job roles
- Professional bodies
- Ethical issues
- Threats and security
- Safe disposal of data and computer equipment

Unit 2 Global Information (exam 90GLH) 1 hour 30 minutes written paper

- Types of information storage media
- Accessibility of world wide web information formats
- Information styles and their uses
- Information management
- UK and global accessibility legislation relating to information
- Information sources and data types
- Protection measure policies



Units 3 Cyber security (exam 60GLH) 1 hour 15 minutes written paper

- How Cyber security aims to protect information
- Types of cyber security incidents
- The importance of cyber security
- Threats to cyber security
- Types of attackers
- Motivation for attackers
- Targets for cyber security threats
- Impacts of cyber security incidents
- Cyber security risk management
- Testing and monitoring measures
- Cyber security controls (access controls)
- Cyber security incident report

Unit 5 Virtual and augmented reality (project 60GLH)

- Understand virtual and augmented reality and how they may be used
- Be able to design virtual and augmented reality resources
- Be able to create a virtual or augmented reality resource
- Be able to predict future applications for virtual and augmented reality.

Unit 13 Social media and digital marketing (project 60GLH)

- Understand digital marketing
- Understand the use of social media in a business
- Be able to plan content and propose appropriate social media channels for digital marketing campaigns
- Be able to develop social media digital marketing campaigns

Unit 8 Project management (project 60GLH)

- Understand the project life cycle
- Be able to initiate and plan projects
- Be able to execute projects
- Be able to carry out project evaluations

Unit 9 Product development (project 60GLH)

- Understand the product development life cycle
- Be able to design products that meet identified client requirements
- Be able to implement and test products
- Be able to carry out acceptance testing with clients

Unit 12 Mobile technology (project 60GLH)

- Understand mobile technologies
- Be able to investigate how businesses use mobile technologies
- Be able to determine solutions for the use of mobile technologies
- Be able to present solutions for the use of mobile technologies

Unit 16 Developing a Smarter Planet (project 60GLH)

- Understand what is meant by a Smarter Planet
- Be able to propose ways to extend the scope of the Smarter Planet
- Be able to present, refine and evaluate Smarter Planet concepts

Unit 17 Internet of Everything (project 60GLH)

- Understand what is meant by the Internet of Everything (IoE)
- Be able to repurpose technologies to extend the scope of the IoE
- Be able to present concept ideas for repurposed developments



Unit 18 Computer systems – hardware (project 60GLH)

- Understand the components of a computer system
- Be able to propose a computer system for identified business requirements
- Be able to build or upgrade computers
- Be able to test and evaluate the functionality of computer systems

Aims:

The aims of the OCR Cambridge Technicals are to widen participation in vocational or work-related learning with a view to equipping learners with skills they will need in the workplace or in Further Education and training. They will also allow students to experience vocationally related learning to see if it is suitable for them.

Possible careers:

These qualifications are designed to enable learners to enter employment at an operative or trainee level within a wide range of Information and Communication Technology environments. Such learners would normally enter employment through a work-related training programme. The OCR Cambridge Technicals in ICT have been designed to provide a broad educational basis for Further Education or for moving into employment within the ICT sector. Students will develop the general skills, knowledge and understanding needed within the sector. Cyber Security apprenticeships at places like GCHQ are a popular destination for students who study this qualification.

Grading:

Depending on the GLH value, the Unit will have a value depending on the grade obtained based on the table below:

Unit GLH	pass	merit	distinction	unclassified
30	7	8	9	0
60	14	16	18	0
90	21	24	27	0

All 11 Units will combine so that the learner will be awarded an overall grade based on the table below:

Points range	Grade	
208 and above	Distinction* Distinction*	D* D*
204 - 207	Distinction* Distinction	D* D
200 - 203	Distinction Distinction	D D
192 - 199	Distinction Merit	D M
184 - 191	Merit Merit	M M
176 - 183	Merit Pass	M P
144 - 175	Pass Pass	P P
Below 144	Unclassified	U