OCR
Oxford Cambridge and RSA

Qualification Title: OCR Level 3 Cambridge Technical Extended Diploma in IT

Qualification Number: 603/0309/8

Overview

This qualification is intended as a Tech Level and is designed for you if you're 16 -19 years old. It is equivalent in size to 3 A levels and is intended to be your full study programme.

The qualification allows you to study IT in a context that enables you to learn and be assessed in ways that are practical and relevant to the IT sector. Employers have told us that they need people who are able to help them develop their systems or the systems for their customers, to use IT to strategically view the IT landscape and to exploit new technologies to gain business advantage. They have identified that future skills gaps need to be filled for new and emerging technologies. This qualification, therefore, is specifically designed to give you comprehensive knowledge, not available in the smaller qualification sizes, which will allow you to specialise with breadth and depth into more specialist and cutting edge job roles across the sectors.

You will choose to study units from one of two specialist pathways depending on the career you wish to pursue. The two pathways are Digital Technician and Application Data Practitioner.

You will take seventeen units (seven mandatory and ten optional units). There are five mandatory units that are in both pathways; *Fundamentals of IT, Global information, Cyber security, Cloud technology* and *Enterprise computing*. The first two units provide you with an insight into the IT sector, as you investigate the pace of technological change, IT infrastructure, and the flow of information on a global scale, as well as the important legal and security considerations. Cyber security reflects an important development in the sector around information security, and requires you to consider how data should be protected and how the IT sector should respond to emerging threats such as cyber terrorism. Cloud technology develops this knowledge into the global usage, application and practice with Cloud technologies. *Enterprise computing* will be the synoptic unit (it is recommended that this unit is completed at the end of the learning programme) as it will allow you to evaluate global organisations and make recommendations for how the application of Enterprise Computing can meet changing business needs.

In addition, you are required to complete twelve further units, two of which must be the designated mandatory units for your chosen pathway. In the Digital Technician pathway the two additional mandatory units are *Computer networks* and *Virtual augmented reality*. In the Application Data Practitioner Pathway the two additional mandatory units are Application Design and Data Analysis and Design.

From the remaining ten optional units there is a unit specific to this qualification – *Cognitive computing*. This unit will prepare you for job roles which involve creative, smart thinking and

learning systems that will second guess humans in thinking, research and complex analysis tasks to suggest credible and operational options.

There are no formal entry requirements or requirement for any specific prior learning, although you will need a good level of literacy and numeracy skills and an excitement for technology.

What could this qualification lead to?

The Digital Technician pathway will lead to specific job roles which include: IT technical support, Database administrator, Field technician, Network technician, Infrastructure technician, Network planner, Network engineer, Junior digital content developer, 3D graphics technician, Virtual Reality software technician, Software developer, Digital identity planners or Digital content developer.

The Application Data Practitioner pathway will lead to specific job roles which include: Web application developer, Software engineer, Mobile application developer, Application developer, Software analyst, Data analyst, Data quality analyst, Statistical data analyst, Big data architect, Digital data analyst or Customer insight analyst, Software Developer, Digital Marketer, Software Tester, Data Analyst, Cyber Intrusion Analyst, IT Technical Sales and Digital Service Operator.

The introduction of new units which are available in both pathways of the Extended Diploma, such as Cloud Technology, Enterprise Computing and Cognitive Computing, allow for additional job roles which are not available in the smaller qualification sizes. These include Cloud Technician, Cyber Intrusion Analyst, Unified Communications Trouble shooter, Cyber Security Technologist, Cloud systems support technician for the data centres, Internet of things designer or planner, Container developers and trainee architects, Cognitive computing engineer/machine learning specialist and Unified Communications Technician.

The qualification will enable you to acquire a range of transferable skills and knowledge which are highly regarded by higher education providers and employers. It has UCAS tariff points and provides a good grounding for progression to University to take one of many relevant degree programmes, for example: Computing and ICT; Computing Science; Software Developments; Software Engineering; ICT and Computer Networks; Business Information Systems. (It is always important to check individual course requirements when applying to university)

The qualification could also provide you with a head start into apprenticeship programmes (e.g. Network Engineer or Software Developer), or directly into employment, whilst still providing you with the option of progression into a related HE course as listed above.

This qualification is part of a suite of Cambridge Technicals in IT at Levels 2 and 3. Normally, you would choose one of the OCR Level 3 Cambridge Technicals in IT because you have successfully gained Level 2 qualifications in a similar or related subject, but there is no formal entry or prior learning requirements for this qualification.

This is one of six qualifications available in the Level 3 Cambridge Technicals in IT suite:

- OCR Level 3 Cambridge Technical Certificate in IT (equivalent in size to one AS level)
- OCR Level 3 Cambridge Technical Extended Certificate in IT (equivalent in size to one A level)
- OCR Level 3 Cambridge Technical Introductory Diploma in IT (with specialist pathways) (equivalent in size to one A level)
- OCR Level 3 Cambridge Technical Foundation Diploma in IT (with specialist pathways) (equivalent in size to one and a half A levels)

- OCR Level 3 Cambridge Technical Diploma in IT (with specialist pathways) (equivalent in size to two A levels)
- **OCR Level 3 Cambridge Technical Extended Diploma in IT (with specialist pathways) (equivalent in size to three A levels)**

This qualification is a similar size to three A levels and it's the largest of the qualifications in this suite. As you will be taking more units it will enable you to increase the breadth and depth of your knowledge, skills and understanding in your chosen pathway. It will be the main qualification in your study programme although you could achieve other qualifications to complement this one, whether vocational or academic, in preparation for employment or further study in the IT sector via apprenticeships or higher education.

The Introductory Diploma, Foundation Diploma and Diploma are smaller in size; you will still follow a specialist pathway but will take fewer units. Both will provide you with the flexibility to achieve other qualifications in your study programme, whether vocational or academic, in preparation for employment, apprenticeship or further study in this sector (via higher education).

The Extended Certificate is similar in size to one A Level but it does not contain specialist pathways; it contains units which provide the breadth of knowledge, understanding and skills to prepare you for further study in this sector. The Certificate is the smallest qualification and would support your main subjects in your study programme to prepare you for further study.

Who supports this qualification?

The following employers and professional bodies support this qualification:

Digital Technician/Applied Data Practitioner pathways
- CompTIA UK Ltd
- IBM United Kingdom Limited
- Fujitsu Services Limited

Details of this support can be found on the OCR website: http://www.ocr.org.uk/qualifications/by-type/vocational-education-and-skills/purpose-statements-and-letters-of-endorsement/

Further information

For more information on the specification and associated assessment materials please refer to: http://www.ocr.org.uk/qualifications/vocational-education-and-skills/cambridge-technicals-it-level-2-2017-suite/

About us

OCR is a leading UK awarding body. We provide qualifications which engage people of all ages and abilities at school, college, in work or through part-time learning programmes.

Our general and vocational qualifications equip you with the knowledge and skills needed for the future, helping you to achieve your full potential.