

## Cambridge TECHNICALS LEVEL 3

# IT

Unit 1 – Fundamentals of IT  
RESOURCE LINKS

Version 1

Cambridge  
TECHNICALS  
2016

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# INTRODUCTION

Resource Links is an e-resource, provided by OCR, for teachers of Cambridge Technicals. It provides descriptions of, and links to, a variety of teaching and learning resources that you may find helpful.

Where appropriate, we have mapped the resources to this OCR unit/learning outcomes (LOs) and provided information about their cost and format.

If you know of other resources you would like to see included here, or discover broken links, please let us know. We would also like to hear from you if have any feedback about your use of these, or other, OCR resources. Please contact us at [resources.feedback@ocr.org.uk](mailto:resources.feedback@ocr.org.uk)

To find out more about this qualification please go to: <http://www.ocr.org.uk/qualifications/cambridge-technicals-it-level-3-certificate-extended-certificate-introductory-diploma-foundation-diploma-diploma-05838-05842-2016-suite>

Cambridge  
TECHNICALS  
2016

## 2016 Suite

- New suite for first teaching September 2016
- Externally assessed content
- Eligible for Key Stage 5 performance points from 2018
- Designed to meet the DfE technical guidance

## TYPES OF RESOURCE

### OCR Produced Resources

These are resources devised and produced directly by the Resources Development Team at OCR.

### Publisher Partner Resources

For many subjects OCR works with a publisher partner to ensure that good quality resources such as textbooks are available for first teaching.

Whilst the publisher partner has access to our subject experts and we quality check and endorse these resources they are produced by, and remain the property of, the publisher partner. There is no financial link between OCR and its publisher partners and we do not pay for the development of, or receive any royalties from, these resources.

### Endorsed Resources

These resources were produced entirely independently of OCR, but we have quality checked them for their suitability as a resource to support our qualifications.

### Other Resources

Unless specifically stated these resources are completely independently produced and are not endorsed by OCR. We have looked at them though, and we think they could be useful in supporting our specifications.

We leave it to you, as a professional educator, to decide if any of these resources are right for you and your students, and how best to use them.

# LINKS

## Computers

A website providing comprehensive coverage of computer components.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

<http://www.explainthatstuff.com/howcomputerswork.html>

## White, R. and Downs, T.E. (2014) *How Computers Work*

A definitive illustrated guide to the world of PCs and technology.

**Supports:** LO1

**Cost:** £19.98

**Format:** Book

[http://www.amazon.co.uk/gp/product/078974984X?keywords=how%20computers%20work&qid=1439197681&ref\\_=sr\\_1\\_1&sr=8-1#reader\\_078974984X](http://www.amazon.co.uk/gp/product/078974984X?keywords=how%20computers%20work&qid=1439197681&ref_=sr_1_1&sr=8-1#reader_078974984X)

## Communication device

Comprehensive coverage of communication devices.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

<http://www.computerhope.com/jargon/c/communication-devices.htm>

## Network Hardware

Descriptions and explanations of network hardware.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

[http://www.teach-ict.com/gcse\\_new/networks/hardware/miniweb/index.htm](http://www.teach-ict.com/gcse_new/networks/hardware/miniweb/index.htm)

## Build a network

Interactive instructions on how to build a network.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

[http://www.teach-ict.com/gcse\\_new/networks/hardware/resources/NWB\\_SIM.swf](http://www.teach-ict.com/gcse_new/networks/hardware/resources/NWB_SIM.swf)

## Conversion Calculator

A byte to file size calculator.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

<http://www.t1shopper.com/tools/calculate/>

## Number Systems: An Introduction to Binary, Hexadecimal, and More

An article explaining number systems, with interactive learning aids.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

<http://code.tutsplus.com/articles/number-systems-an-introduction-to-binary-hexadecimal-and-more--active-10848>

## IT Computer Data Storage Unit Conversion

A tool to convert converts data storage into computer data units.

**Supports:** LO1

**Cost:** Free

**Format:** Web page

<http://www.unit-conversion.info/computer.html>

## Software

Definitions of types of software.

**Supports:** LO2

**Cost:** Free

**Format:** Web page

<http://www.computerhope.com/jargon/s/software.htm>

## Understanding Applications

Descriptions of types of desktop applications.

**Supports:** LO2

**Cost:** Free

**Format:** Web page

<http://www.gcflernfree.org/computerbasics/3>

## 55 Types of Electronic Communication in the Workplace

A comprehensive list of modern communication methods.

**Supports:** LO2

**Cost:** Free

**Format:** Web page

<http://www.workplace-communication.com/types-electronic-communication.html>

## Basic Troubleshooting Techniques

A comprehensive coverage of troubleshooting techniques.

**Supports:** LO2

**Cost:** Free

**Format:** Web page

<http://www.gcflernfree.org/computerbasics/15/print>

## TCP/IP Networking Protocols

Definitions of network protocols.

**Supports:** LO2

**Cost:** Free

**Format:** Web page

<http://www.comptechdoc.org/independent/networking/protocol/protnet.html>

## Understanding your business's IT needs

An introduction to setting IT systems in business.

**Supports:** LO3

**Cost:** Free

**Format:** Video

<https://www.gov.uk/understanding-business-it-needs>

## Different Types of Servers

Comprehensive coverage of different types of servers.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

<http://www.buzzle.com/articles/different-types-of-servers.html>

## Virtualisation

Comprehensive coverage of virtualisation technology.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

<http://searchvirtualdatacentre.techtarget.co.uk/definition/Virtualisation>

## Cloud and virtualisation

A collection of up to date articles on cloud computing and virtualisation.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

<http://www.information-age.com/technology/cloud-and-virtualisation>

## Data Communication and Computer Network

Online tutorial explaining networking characteristics and connectivity methods.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

[http://www.tutorialspoint.com/data\\_communication\\_computer\\_network/index.htm](http://www.tutorialspoint.com/data_communication_computer_network/index.htm)

## Networking Basics – Key Concepts in Computer Networking

Several articles and other resources dealing with networking characteristics and connectivity methods.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

[http://compnetworking.about.com/od/basicnetworkingconcepts/u/computer\\_networking\\_basics.htm](http://compnetworking.about.com/od/basicnetworkingconcepts/u/computer_networking_basics.htm)

## Information Systems and Strategy

Comprehensive coverage of business information systems.

**Supports:** LO3

**Cost:** Free

**Format:** Web page

[http://www.chris-kimble.com/Courses/World\\_Med\\_MBA/Types-of-Information-System.html](http://www.chris-kimble.com/Courses/World_Med_MBA/Types-of-Information-System.html)

## Interpersonal Skills Self-Assessment

A quiz that assesses the user's interpersonal communication skills.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.skillsyouneed.com/ls/index.php/343479/>

## What Sort of Leader Are You?

A quiz that assesses the user's leadership attributes.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.skillsyouneed.com/ls/index.php/325444>

## Information Technology and Human Communication in the Workplace

Article discussing IT and communication in a work environment.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.people-communicating.com/technology-and-human-communication.html>

## What jobs are available in the computer industry?

Detailed descriptions of a range of IT job roles.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.computerhope.com/issues/ch000764.htm>

## BCS

Website of an IT professional body: BCS, The Chartered Institute for IT.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.bcs.org/category/1>

## UK IT Association

Website of an IT professional body: the UK IT Association.

**Supports:** LO4

**Cost:** Free

**Format:** Web page

<http://www.ukita.co.uk/>

## Workplace policies and procedures

Examples of workplace policies.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

[http://www.industrialrelations.nsw.gov.au/oirwww/Employment\\_info/Managing\\_employees/Workplace\\_policies\\_and\\_procedures.page#Types\\_of\\_workplace\\_policies](http://www.industrialrelations.nsw.gov.au/oirwww/Employment_info/Managing_employees/Workplace_policies_and_procedures.page#Types_of_workplace_policies)

## 10 ethical issues confronting IT managers

Article investigating the ethics of data and employee management.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

<http://www.techrepublic.com/article/10-ethical-issues-confronting-it-managers/>

## Lewin's Change Management Model

Video and article discussing the theory of change management.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

[http://www.mindtools.com/pages/article/newPPM\\_94.htm](http://www.mindtools.com/pages/article/newPPM_94.htm)

## 28 Types of Computer Security Threats and Risks

Article discussing several computer threats.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

<http://www.itscolumn.com/2012/03/28-types-of-computer-security-threats-and-risks/>

## Get Safe Online Free expert advice

A website providing advice on physical and digital security.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

<https://www.getsafeonline.org/>

## Legal Obligations

Advice on the disposal of data and computer equipment.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

[http://www.it-trading.co.uk/content/legal\\_obligations.htm](http://www.it-trading.co.uk/content/legal_obligations.htm)

## Are you legal?

A website providing advice on the disposal of data and computer equipment.

**Supports:** LO5

**Cost:** Free

**Format:** Web page

<https://www.sitd.co.uk/are-you-legal>





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