

Cambridge **TECHNICALS LEVEL 3**

IT

Cambridge
TECHNICALS
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MAPPING GUIDE

Unit 19 Computer Systems - Software

Version 1

INTRODUCTION

Prodigy are delighted to work with OCR, a progressive Awarding Organisation, who share the ambition of providing high-quality qualifications, learning solutions that are industry-led and reliable and valid assessment. The Cambridge Technicals in IT qualifications provide 'future-ready' skills for a learner to further their ambitions, whether that is in terms of further academic study, enter an apprenticeship or as a springboard to gaining employment.

Prodigy Learning (Prodigy) is an award-winning EdTech business providing digital skills certifications and learning solutions for a range of technologies including Adobe, Autodesk and Microsoft. Established in 2000, Prodigy now have offices in Dublin, London and Sydney. Having worked closely with Microsoft since 2000, Prodigy is a Microsoft Authorised Education Gold Partner and a MS Global Training Partner supporting academic institutions utilise Microsoft Imagine Academy, Microsoft certifications and other Microsoft Education solutions.

Historically, the UK has thrived on a rich research and technology base and has been at the forefront of global technology innovation. Enthusiasing young learners about following exciting careers in science, technology, engineering and mathematics (STEM) subjects is fundamental to maintaining this success. However, currently the UK has a widely acknowledged skills gap in the pipeline of talent studying computing-related disciplines. Therefore, providing high quality, engaging and relevant qualifications that equip learners with current technical knowledge and skills is essential to encourage more young people into the computing discipline, and moreover to ensure they progress to jobs in the sector.

MAPPED TO MTA WINDOWS OS FUNDAMENTALS 98-349

2. Installing and upgrading client systems

	2.1.1 Identify hardware and compatibility requirements	2.1.2 determine appropriate editions per device type	2.2.1 Identify upgrade paths from previous Windows versions	2.2.2 identify application compatibility	2.3.1 Perform a clean install	2.3.2 upgrade via Windows Update	2.3.3 migrate from previous Windows versions	2.3.4 perform removable media installation	2.3.5 perform network installation	2.4.1 Understand kernel mode	2.4.2 understand user mode	2.4.3 understand memory, IRQs, drivers, CPUs, and UI	2.4.4 understand 32-bit vs. 64-bit architecture
1.1.2 Systems software - operating systems: closed (e.g. Windows)	X	X	X	X	X	X	X	X	X	X	v	X	X
1.3.1 Reasons for installation or upgrade - improvement to systems (e.g. stability, performance, security, productivity)			X										
1.3.2 Reasons for installation or upgrade - resolve issues (e.g. viruses, conflicts etc.)			X										
1.3.3 Reasons for installation or upgrade - addresses risks (e.g. loss of data, loss of service, system downtime, costs)			X										

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1.3.4 Reasons for installation or upgrade - security risks (e.g. prevention, rectification)			X										
1.3.5 Reasons for installation or upgrade - access to additional features/functions			X										
1.3.6 Reasons for installation or upgrade - support installation of new hardware			X										
1.3.7 Reasons for installation or upgrade - address end user requirements			X										
1.5.1 Types of installation - creating image/ghosting (e.g. make a copy of the hard drive configuration and software)	X	X	X	X	X	X	X	X	X	X	X	X	X

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1.5.2 Types of installation - unattended installations	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.3 Types of installation - upgrade	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.4 Types of installation - clean install	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.5 Types of installation - repair installation	X	X	X	X		X	X	X	X	X	X	X	X
1.5.6 Types of installation - multi-boot	X	X	X	X		X	X	X	X	X	X	X	X
1.5.7 Types of installation - remote network installation	X	X	X	X		X	X	X	X	X	X	X	X
1.5.8 Types of installation - image deployment	X	X	X	X		X	X	X	X	X	X	X	X
1.5.9 Types of installation - Windows networking	X	X	X	X		X	X	X	X	X	X	X	X

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1.5.10 Types of installation - Mobile device networking connectivity and email.	X	X	X	X	X	X	X	X	X	X	X	X	X

4. Managing files and folders

	4.2. Understand file and print sharing	4.2.1 Configure File System permissions	4.2.2 configure Share Permissions	4.2.3 configure Home Group settings	4.2.4 configure print drivers	4.2.5 configure effective permissions; shares	4.3. Understand encryption: Understand BitLocker and Encrypting File System (EFS)
1.3.1 Reasons for installation or upgrade - improvement to systems (e.g. stability, performance, security, productivity)	X	X	X	X		X	X
1.3.6 Reasons for installation or upgrade - support installation of new hardware					X		

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5. Managing devices

	5.1.1 Connect plug-and-play devices	5.1.2 connect and disconnect printers	5.1.3 install third-party software for devices	5.3. Understand printing devices: Understand local printers, network printers, print queues, print-to-file, and Internet printing	5.4.1 Understand video, audio, and infrared input devices	5.4.2 understand Device Manager
1.3.6 Reasons for installation or upgrade - support installation of new hardware	X	X	X	X	X	X

6. Understanding operating system maintenance

	6.1. Understand backup and recovery methods	6.1.1 Configure System Restore; configure a recovery drive	6.1.2 configure recovery boot options such as Last Known Good and various Safe Mode options	6.1.3 recover files from OneDrive	6.2. Understand maintenance tools	6.2.1 Understand Disk Defragmenter	6.2.2 Disk Clean-up	6.2.3 Task Scheduler	6.2.4 System Information	6.3. Configure updates	6.3.1 Configure Windows Update options; implement Insider Preview, Current Branch, and Current Branch for Business scenarios	6.3.2 manage update history	6.3.3 roll back updates
1.1.3 Systems software - utility programmes					X	X	X	X	X				
1.5.2 Types of installation - unattended installations	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.3 Types of installation - upgrade	X	X	X	X	X	X	X	X	X	X	X	X	X

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1.5.4 Types of installation - clean install	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.5 Types of installation - repair installation	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.6 Types of installation - multi-boot	X	X	X	X	X	X	X	X	X	X	X	X	X
1.5.7 Types of installation - remote network installation	X	X	X	X	X	X	X	X	X	X	X	X	X
2.1.1 Software installation/ upgrade considerations - end user requirements										X	X	X	X
2.1.2 Software installation/ upgrade considerations - other stakeholder requirements (e.g. management)										X	X	X	X

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2.1.3 Software installation/ upgrade considerations - costs										X	X	X	X
2.1.4 Software installation/ upgrade considerations - existing configuration and software										X	X	X	X
2.1.5 Software installation/ upgrade considerations - service level agreement										X	X	X	X
2.1.6 Software installation/ upgrade considerations - software licencing: end user license agreement (eula)										X	X	X	X

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2.1.7 Software installation/ upgrade considerations - software licensing: freeware										X	X	X	X
2.1.8 Software installation/ upgrade considerations - software licensing: shareware										X	X	X	X
2.1.9 Software installation/ upgrade considerations - software licensing: open source										X	X	X	X
2.1.10 Software installation/ upgrade considerations - system requirements: minimum specification										X	X	X	X

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2.1.11 Software installation/ upgrade considerations - system requirements: recommended specification										X	X	X	X



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