

# Microsoft® IT Academy Program

## Curriculum Mapping to Standards

The Alignment of Academic and Vocational Standards and Courses  
with Microsoft Certifications and Microsoft IT Academy Resources



Turn potential into success

## How to use this document:

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### What is this document?

In this document, you will find an introduction to mapping and the parameters used, as well as how Microsoft Certifications and IT Academy learning curriculum relate to popular international frameworks.

- This is an independent and informed assessment of the certification and learning materials in the context of international and country-specific education standards (mapping prepared on behalf of Microsoft by IT<sup>cert</sup> Solutions Ltd.).
- The mapping allows for country-based educators to quickly and clearly understand areas of overlap and opportunity in their current curriculum with respect to that of the Microsoft IT Academy.
- The demonstration of mapping to standards can also assist in receiving government funding in countries where only approved qualifications are eligible.

### Who is this document for?

This document is suitable for IT Academy Program Managers, Authorized Education Partners, and others to use when promoting Microsoft certifications and Microsoft IT Academy membership. This document describes and articulates the links between vendor programs and academia.

### Why map to certifications?

Vendor certifications are assessments of skills and knowledge that are designed by a vendor to assess competence, typically related to specific products. When products are widespread and valued by employers, and acquisition of the related skills is important in the labor market, it becomes essential that these certifications are included in academic curricula.

When considering the delivery of vendor certifications in academic organizations, it is important that the following questions are asked:

- Are the learning outcomes clearly defined?
- Is there a robust assessment strategy?
- What are the level and size of the learning?
- Is the learning both generic and product specific?
- What support materials are available?
- Is there a quality assurance system aligned to the vendor program?

And most importantly:

## How does the certification align to national or local standards or frameworks?

### Why Microsoft Certifications?

- Microsoft Certification meets high-level quality assurance requirements and has been accepted by many of the world's leading validating and endorsement bodies, such as the American National Standards Institute (ANSI), the American Council on Education (ACE) and the Higher Education and Training Awards Council (HETAC).
- All Microsoft Certifications have clearly defined learning outcomes and provide clear guidance for candidates and educators. The learning outcomes are comprehensively and rigorously tested in the assessment.
- Microsoft Certifications have clearly articulated programs of learning.
- Much of the learning covers "vendor neutral" skills and concepts.
- All Microsoft Certifications have related learning and support materials, and these are often available at a lower price point to IT Academy Program members.

### Overview of Mapping the IT Academy Curriculum, Including Microsoft Certifications and Learning Materials to National and Local Standards

There are many reasons why it may be necessary to map, align, or signpost different programs of learning to Microsoft Certifications. For example, an academic institution might want to know how the learning outcomes of a Microsoft Certification relate to a particular unit or program of learning. Mapping or signposting can provide this information, enabling an educator and/or administrator to make use of the best-in-class learning support materials provided by Microsoft to introduce learners to the latest technologies.

The level of detail required when undertaking the alignment of Microsoft Certifications will vary. In some cases it will be important to identify that there is a clear link at the learning outcome level. In cases where the Microsoft certification will be accepted as an alternative assessment strategy for a learning unit this detailed mapping is essential. In circumstances where the aim is to introduce the learner to concepts, often signposting to a suitable certification may be sufficient.

Mapping should be undertaken only by those with an understanding of the content, who have the knowledge to make academic judgments and who have the confidence of those who will use the output.

IT<sup>cert</sup> Solutions Ltd can provide free advice on the approach to mapping and will also undertake commissions to provide a mapping service for a fee.

This document and the associated spread-sheets detail the alignment of Microsoft Certifications with a wide range of global frameworks.

## Introduction to Mapping

In the IT sector, certifications and qualifications are often divided in to two distinct groups:

- **IT professional units**– For those who **maintain and support IT**, for example, covering the configuration of servers or the support of client operating system software. Examples of IT professional units include the Microsoft Certified Desktop Support Technician (MCDST), SharePoint, and Windows Server 2008 certifications.
- **IT user units** – For those who **use IT**, mainly covering the use of applications such as Microsoft Word, Excel, Project, or Access. A full list is given later in this document. These applications are often referred to as “productivity programs”

### Microsoft Certifications & Exams

All Microsoft Certifications other than the Microsoft Digital Literacy Curriculum are awarded after the completion of online, computer-assessed, proctored exams facilitated by specialist test providers. These exams are normally task oriented and performance based, and use “in application” or “rich simulation.”

### Levels

It is possible to assign comparative levels to the individual courses and certifications, but the names for these levels may well differ within different education and workforce development frameworks. The following gives an indication of the levels appropriate to Microsoft Certifications, as well as their relationship.

For illustrative purposes only, the following table can be used as a guide to the levels associated with Microsoft Certifications:

Academic Level	Microsoft Terminology	Microsoft Offering	Certification Title Examples
Basic Entry Level	Entry Level	Microsoft Digital Literacy Curriculum	
Entry Level	Foundation & Intermediate	Microsoft Office Core	Microsoft Office Specialist (MOS) and Microsoft Technical Associate (MTA)
Further or Continuing Education	Advanced	Microsoft Office Expert	Microsoft Office Specialist
Higher Education (HE)	Professional		Microsoft Certified Master

It should be noted that to achieve an advanced level in a Microsoft Professional Certification may require more learning and involve more content than an advanced level in an Office Specialist discipline.

## Signposting / Mapping to Courses or Certifications

Certification exams may contain content that must be learned through more than one course. This is often because the content has been arranged more logically to align with a program of learning. Courses are not designed purely to enable candidates to achieve certification, although this will obviously be a key objective. It is important that learners become fully competent in the use of the technology. The certification exam is the assessment of those skills. However, it should be noted that there is additional learning available that may not be directly linked to a Microsoft Certification. In cases where multiple certifications are relevant, generally the most recent versions have been indicated to enable academia to be aligned to the most current technology.

**Microsoft Certifications** normally equate to academic or vocational **units**,

This relationship can take many different forms, for example:

- The learning material has suitable content to be valuable as a learning aid. For example, individual E-Learning lessons for Excel might be used by a teacher prior to a class being asked to record the results of a lab experiment. In the IT Academy E-Learning portfolio, there are a number of collections that have no direct relationship with existing Microsoft Certifications or with the IT Academy Program, but provide current and important learning – for example, on OneNote.
- The certification itself may be accepted as an important program of learning, embedded into a framework or curriculum as a product-specific unit, and is accepted as meeting the assessment strategy for that unit.
- The certification may have been mapped to an existing unit and it can be demonstrated that sufficient learning outcomes are assessed by the Microsoft Certification exam, the owner of the existing exam may accept the Microsoft Certification as meeting the assessment criteria for that unit.

### **Are there Microsoft Certifications for the teacher leading the courses?**

Microsoft and Certipoint have qualifications that refer to the skills required to provide excellent instruction on related products. In both cases, candidates have to complete a combination of certification exams and provide proof of their ability to teach.

The Microsoft Certified Trainer (MCT) program is best known for trainers in the technical strand and is mandatory for the Microsoft Certified Partners for Learning Partners (CPLS). There is also an MCT certification available for Microsoft Office Specialist 2007 and 2010 instructors. The award is achieved by completing certification exams and the additional validation of instructor skills. This may be through the “accreditation of prior learning” (APL) or by attending an approved course. Refer to [www.microsoft.com/learning/mcp/mct/](http://www.microsoft.com/learning/mcp/mct/) for more information

## Where are Microsoft Certifications most likely to align to academic or vocational units?

There are four major areas of curriculum that can benefit from alignment with Microsoft Certifications and the related learning material:

- Many academic frameworks or programs of learning now have a **core requirement for IT skills** from an early age. These skills may be referred to as key, core or functional skills and will be embedded into the school curriculum or mandated as entry criteria for vocational programs. These are most likely to be aligned to **Microsoft Digital Literacy Curriculum**.
- Skills relating to the use of **end-user application programs**, such as Microsoft Word, are valuable for all those in the modern workforce or as a pre-requisite for higher education. The testing of these skills fully validates that the student can use the full functionality of IT application programs. In cases where the student is expected to demonstrate the application of these skills and produce an end product, then the certification will fully cover the underpinning knowledge. There may be additional guidance in the learning material for the application of these skills in the workplace. These skills are most likely to be aligned to **Microsoft Office**.
- The **foundation technical skills** required by those who support IT and wish to develop IT as a career are most likely to be covered by the **Microsoft Technical Associate (MTA) Certification**.
- Microsoft Certifications cover many **technical skill and knowledge** areas, including client support, software development, system design, database administration, and enterprise networks. There is a comprehensive range of Microsoft Certifications aligned to the Microsoft product offering. These skills will be covered by the **Microsoft Certified Professional** and **Technical Specialist** certifications.

## Mapping Overview by Country

### Abbreviations

MDLC	Microsoft Digital Literacy Curriculum
MOAC	Microsoft Official Academic Course
MOS	Microsoft Office Specialist
MOC	Microsoft Official Curriculum
MCT	Microsoft Certified Trainer
MS ITA	Microsoft IT Academy Program

There are associated mapping sheets for all the countries/frameworks listed below in the corresponding Excel spread-sheet, available via download.

### Australia

<b>Australia (The Information and Communications Technology Training Package) "AU ICA05"</b>	
Reference source	<a href="http://www.ibsa.org.au/training-packages/by-industry/information-and-communications-technology.aspx">http://www.ibsa.org.au/training-packages/by-industry/information-and-communications-technology.aspx</a>
Mapped by	IT <sup>cert</sup>
Reviewed	2010
Comments	This framework relates to the development of skills for those entering the workplace. This is a comprehensive set of national ICT standards. At the <a href="#">vendor mapping portal</a> IT <sup>cert</sup> has mapped the core units at the certificate levels most appropriate to the ITA. No mapping has taken place beyond Level 4. In total, there are many hundreds of units, with associated multiple learning outcomes. There is, however, considerable replication of units, with only a change in context or level of complexity or autonomy.

<b>Australia (National standard statements of learning for ICT)</b>	
Reference source	<a href="http://www.mceecdya.edu.au/verve/resources/SOL ICT Copyright update2008.pdf">http://www.mceecdya.edu.au/verve/resources/SOL ICT Copyright update2008.pdf</a>
Mapped by	IT <sup>cert</sup>
Reviewed	June 2010
Comments	Statements of Learning for Information and Communication Technologies (ICT) define and deliver common school curriculum outcomes to be used by jurisdictions to inform their own curriculum development. These outcomes are most closely aligned to MDLC.

## Canada

<b>Canada (Alberta) "Augmented Alberta"</b>	
Reference source	Microsoft
Mapped by	Mapped by external contractor
Approval	Not known
Reviewed	This mapping has not been formally approved by the framework.
Comments	IT <sup>cert</sup> has added supplementary information to the mapping sheet to include references to certification numbers, MOAC, and additional collections of E-Learning. There has been no additional validation of the mapping.

## France

<b>France "France"</b>	
Reference source	<a href="http://www.educnet.education.fr/en">http://www.educnet.education.fr/en</a>
Mapped by	IT <sup>cert</sup>
Approval	This mapping has not been formally approved by the framework.
Comments	The relevant curricula were determined as B2i and C2i from the national standards for technology education in France. B2i is appropriate at all levels of school education, and C2i is a logical progression and more vocational in nature. B2i and C2i are certificated awards.

## International Educational Standards (ISTE)

<b>ISTE – International Educational Standards (NETS.S) and Performance Indicators for Students "ISTE"</b>	
Reference source	<a href="http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/NETS_for_Students.htm">http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/NETS_for_Students.htm</a>
Mapped by	Completed by IT <sup>cert</sup> in March 2010.
Reviewed	June 2010
Comments	Some areas of underpinning knowledge mainly covered by MDLC and MOS.

## McREL

<b>McREL – Compendium “McREL”</b>	
Reference source	<a href="http://www.mcrel.org/compendium/SubjectTopics.asp?SubjectID=19">http://www.mcrel.org/compendium/SubjectTopics.asp?SubjectID=19</a>
Mapped by	Completed by IT <sup>cert</sup> in June 2010.
Reviewed	June 2010
Comments	This is mainly covered by MDLC.

## United Nations Educational, Scientific and Cultural Organization (UNESCO)

<b>UNESCO ICT Competency Framework for Teachers “UNESCO”</b>	
Reference source	<a href="http://portal.unesco.org/ci/en/ev.php-URL_ID=22997&amp;URL_DO=DO_TOPIC&amp;URL_SECTION=201.html">http://portal.unesco.org/ci/en/ev.php-URL_ID=22997&amp;URL_DO=DO_TOPIC&amp;URL_SECTION=201.html</a>
Mapped by	IT <sup>cert</sup>
Reviewed	2010
Comments	These Standards were mapped by IT <sup>cert</sup> to Microsoft Digital Literacy Curriculum in 2008 and relate to the skills required by those who teach. The mapping document has been included and will be reviewed at a later time to ensure currency. By definition, the skills that have been defined for teachers may potentially be taken as a requirement for students.

## United Kingdom

<b>United Kingdom (Functional Skills) “UK Functional Skills”</b>	
Reference source	<a href="http://www.qcda.gov.uk/qualifications/30.aspx">http://www.qcda.gov.uk/qualifications/30.aspx</a>
Mapped by	IT <sup>cert</sup>
Approval	Approved by QCDA
Reviewed	Not known
Comments	Functional skills are the practical skills in English, information and communication technology (ICT), and mathematics that allow people to work confidently, effectively, and independently in life. The mapping applies only to MDLC.

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<b>United Kingdom (National Occupational Standards for IT Users) "UK NOS IT User"</b>	
Reference source	<a href="http://itq.e-skills.com/Framework/Contributing-Units/">http://itq.e-skills.com/Framework/Contributing-Units/</a>
Mapped by	IT <sup>cert</sup>
Approval	e-skills UK
Reviewed	Jan 2010
Comments	MDLC and MOS certifications fit well with the ITQ, which is effectively the brand name for the UK National Occupational Standards for those who use IT. The certifications provide underpinning knowledge, and in some cases full coverage. To find out if a Microsoft Certification is available within a UK qualification, log on to the <a href="#">National database of Accredited Qualifications</a> . For "units" using the keyword "Microsoft." The results will be displayed and there is a feature that shows related qualifications. The results can be downloaded as a spread-sheet and will indicate the qualification that contains the Microsoft unit. Contact the appropriate awarding body for details relating to the qualification.

<b>United Kingdom (PROCOM National Occupational Standards for IT Professionals)</b>	
Reference source	<a href="http://www.e-skills.com/nvq/1906">http://www.e-skills.com/nvq/1906</a>
Mapped by	IT <sup>cert</sup>
Approval	This mapping is approved by e-skills UK.
Comments	All Microsoft Certifications are mapped to PROCOM, which includes the National Occupational Standards for IT Professionals, which define the competencies required by those who support IT.  To find out if a Microsoft Certification is available within a UK qualification, log on to the <a href="#">National database of Accredited Qualifications</a> . Select a search for "units" using the keyword "Microsoft." The results will be displayed, and there is a feature that shows related qualifications. The results can be downloaded as a spread-sheet and will indicate the qualification that contains the Microsoft unit. Contact the appropriate awarding body for details relating to the qualification.

## California, USA

USA (California)	
Reference source	<a href="http://www.cde.ca.gov/be/st/ss/">http://www.cde.ca.gov/be/st/ss/</a>
Mapped by	IT <sup>cert</sup>
Approval	This mapping has not been formally approved by the framework.
Reviewed	March 2010
Comments	The data for California is sourced from California State Board of Education and relates to ICT educational pathways in the K-12 bracket. The standards include technical content.

## North Carolina, USA

USA (North Carolina) "Augmented North Carolina"	
Reference source	Microsoft
Mapped by	This mapping was completed by an external contractor, and IT Academy – specific material was inserted by IT <sup>cert</sup> to augment the original mapping.
Approval	Not known
Reviewed	Not known
Comments	IT <sup>cert</sup> has added supplementary information to the mapping sheet to include references to certification numbers, MOAC, and additional collections of E-Learning. There has been no additional validation of the mapping.

## Texas, USA

USA (Texas)	
Reference source	<a href="http://www.tea.state.tx.us/index2.aspx?id=6148">http://www.tea.state.tx.us/index2.aspx?id=6148</a>
Mapped by	IT <sup>cert</sup>
Approval	This mapping has not been formally approved by the framework.
Reviewed	Not reviewed
Comments	Texas educational standards are available from Texas Essential Knowledge and Skills pages published by the Texas Education Agency. The relevant sections of chapters 123 and 126 have been mapped, as they define the standards for technology education in their curriculum. The standards in Chapter 123 are most appropriate for middle and high school, and those in Chapter 126 are most appropriate for elementary, middle and high.

## Notes on Additional Standards

### Notes on the European Qualification Framework (EQF)

The [EQF](#) - is a subject-agnostic reference tool of standard learning outcomes and levels. Its primary purpose is to act as a standard translation method between different countries' standards. For example, it allows for understanding equivalence of particular levels, or nomenclature around levels, between countries, or for comparing the different types of degrees available. It does not specify learning outcomes by subject in detail.

Somewhat related, and often referred to at the same time as the EQF, is the [European eCompetence Framework](#). This framework does have subject-specific EQF graded mappable content; however, it refers primarily to the management of IT in its many forms rather than the technical knowledge and skill.

The data in this matrix of ITA available/priced examinations and the related resources to support them are a representation of what is available within the ITA at a fixed point in time (in this case, May 2010). All of these items are subject to continual review, update, and retirement where appropriate, and therefore up-to-date information should always be sought to verify the current position. This is available in the following places:

- **ITA examinations.** Consult the [Member Benefits section](#) of the ITA Administrator web pages and navigate to the Certification/Certification Exams section.
- **Microsoft Official Courseware.** Consult the [Member Benefits section](#) of the IT Academy Administrator web pages and navigate to Curriculum/Professional Courseware.
- **Microsoft Official Academic Courseware.** Consult the [Member Benefits section](#) of the IT Academy Administrator web pages and navigate to Curriculum/Academic Courseware.
- **Microsoft Digital Literacy Curriculum.** consult the [MDLC web pages](#)
- **Wiley Companion.** Contact Wiley for up-to-date information.
- **Wiley Plus.** Navigate to the [Wiley Plus website](#) and click browse the catalogue.
- **IT Academy E-Learning.** Consult the [Member Benefits section](#) of the IT Academy Administrator web pages and navigate to Curriculum/E-Learning, where there is a spread-sheet with the required information. E-Learning content is searchable through [the IT Academy Instructor pages](#). It is necessary to assign an instructor within your Academy first and then log in separately to access these pages.

## Supporting Materials & Reference

### I. List of support materials

<b>Microsoft Digital Literacy Curriculum (MDLC)</b>	
Available from	<a href="http://www.microsoft.com/about/corporatecitizenship/citizenship/giving/programs/up/digitalliteracy/default.aspx">http://www.microsoft.com/about/corporatecitizenship/citizenship/giving/programs/up/digitalliteracy/default.aspx</a>
Content	Candidate Interactive E-Learning, hard copy, assessment test. Tutor support materials including setup guides, test items, and instructor manual. Five modules covering Digital Literacy.
Learning style	multiple
Level	Entry level and Level 1
Reading Age	Equivalent to the reading age required for a newspaper
Learning hours	10 - 15
ITA discounts	Gifted for academic and personal use
Comments	Multiple language versions available. Covers the fundamentals of computer technology.

<b>Microsoft Official Curriculum (MOC)</b>	
Available from	After completing the application process, log on to order courseware online at <a href="https://www.microsoftlearningproducts.com">https://www.microsoftlearningproducts.com</a>
Content	Student and Trainer packs for courses
Learning style	Instructor-led training
Level	Various
Reading Age	Late secondary education and above
Learning hours	Various
ITA discounts	ITA discounts are available
Comments	This benefit of the IT Academy Program provides appropriate academic organizations with access to the learning material typically used by commercial learning providers, including <a href="#">Microsoft Certified Partners for Learning Solutions (CPLS)</a> .

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<b>Microsoft Official Academic Curriculum (MOAC)</b>	
Available from	<a href="http://www.wiley.com/go/moac">http://www.wiley.com/go/moac</a>
Content	Books. E-content, instructor resources, web-based teaching and learning management (Wiley+), virtual labs, and access to trial software.
Learning style	multiple
Level	Entry to the workplace – Level 2 and Level 3
Reading Age	Late secondary education and above
Learning hours	
ITA discounts	15 percent below academic market prices
Comments	Most suitable for secondary-level education, career changers, and those preparing for certification in an instructor-led setting.

<b>Microsoft Certified Trainer (MCT) Support Materials</b>	
Available from	Microsoft Learning accessed through the MCT Portal. For information about MCT membership and benefits, visit <a href="http://www.microsoft.com/learning/en/us/certification/mct.aspx">http://www.microsoft.com/learning/en/us/certification/mct.aspx</a> .
Content	MCTs have access to downloads and to hard-copy ordering processes. Downloads include installation files, student and trainer packs, course preparation materials, MODL courses, lab images, and access to the courseware library.
Learning style	Various
Level	Various
Reading Age	Various
Learning hours	Various
ITA discounts	Most electronic downloads are free to Microsoft Certified Trainers. IT Academies have low- or no- cost MCT membership benefits.
Comments	MCTs have access to a wide range of trainer support materials. The MCT accreditation is obtained after demonstrating both technical competency and instructor skills. The individual MCT transcript details the successful completion of certification exams by the MCT and the list of courses that the MCT is authorized to deliver.

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<b>Microsoft IT Academy E-Learning</b>	
Available from	After completing the Microsoft IT Academy e-learning instructor process and obtaining administrative access codes, administer the content at <a href="http://itacademyinstructor.microsoftelearning.com/">http://itacademyinstructor.microsoftelearning.com/</a> .
Content	E-Learning courses
Learning style	Various
Level	Various
Reading Age	Late secondary education and above
Learning hours	Various
ITA discounts	This is a free benefit of the Microsoft IT Academy Program.
Comments	There may be limitations on availability depending on membership level. The E-Learning courses are of modular construction and can be used to deliver content to meet specific learning outcomes. The E-Learning is contained within a learning management system (LMS) under the administrative control of the instructor.

## II. Definitions

- **Microsoft Series.** A collection of Microsoft Certifications relating to a particular area of specialism.
- **Microsoft Certification.** A certification designated by an exam number, for example 70-271. The first two digits may vary to 72-271 or 73-271, indicating different charging codes relating to academic or IT Academy candidates. The certification will typically relate to a specific set of product-related skills. The convention used in the mapping spread-sheet is to use 70-XXX for 72-XXX and 73-XXX unless an alternative prefix is designated.
- **Microsoft Course.** A Microsoft course is designated by a course number, for example 2264. Courses may include Instructor Led Training, E-Learning, or MOAC courseware and support materials.
- **Vocational or Academic Qualification.** An assessed set of learning outcomes, typically built up of a number of units, some of which may be mandatory and some optional.
- **Vocational or Academic Unit.** An assessed set of learning outcomes relating to a subset of the outcomes required to achieve a qualification.
- **Signposting.** This refers to an assessment of a particular academic or vocational unit or qualification and a pointer to the most appropriate Microsoft certification based on expert opinion.
- **Mapping.** This refers to the analysis of detailed learning outcomes of an academic or vocational unit or qualification, and the detailed comparison by learning outcome with a Microsoft certification.
- **Approved Mapping.** In cases where the mapping has been approved by the owner of the academic or vocational unit, it will be listed as "Approved." This may indicate that there is acceptance that the Microsoft certification covers all or part of the learning outcomes.
- **Knowledge and Competence.** Microsoft Certifications are frequently "knowledge based" and consequently provide extensive underpinning knowledge for work-based activities. The mapping undertaken in this documentation will indicate areas where the knowledge content is covered. Where the academic or vocational unit or qualification requires an additional practical demonstration of the knowledge in a particular context, the mapping will indicate "partial."

This document has been prepared on behalf of Microsoft by [IT<sup>cert</sup> Solutions Limited](#) (IT<sup>cert</sup>), based in the UK. IT<sup>cert</sup> worked closely with Microsoft, The IT Sector Skills Council, and the awarding and regulatory bodies associated with qualifications in the UK academic system. For feedback or questions relating to the content, please contact [mevans@itcertsolutions.co.uk](mailto:mevans@itcertsolutions.co.uk) or phone +44 1460 281 114.

The document can be used by those with little or no experience of certification mapping, and also by those who require more detail. It contains examples of mapping at appropriate levels and worked examples.

# Microsoft® IT Academy Program

Turn potential into success