Digital Apprenticeship
Guide
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Managed by

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1. Introduction

Are you interested in providing digital apprenticeships at your organisation? Or would you like to expand your current digital apprenticeship programme?

Apprenticeships are suitable for people at any level, including school leavers, graduates and experienced staff, so you can either recruit someone new or upskill one of your current employees.

Whether you want to grow your organisation's talent in data analysis, cyber security, software development or another digital role, there is government funding available to help pay for apprenticeship training.

Apprenticeships bring many benefits, for both the employee and the employer. According to the **UK Government Apprenticeships** website:

86% of employers said apprenticeships helped them to develop skills relevant to their organisation

78% of employers said apprenticeships helped them to improve productivity

74% of employers said apprenticeships helped them to improve the quality of their product or service

In this guide, we provide an overview of the digital apprenticeship standards currently available for delivery in the UK at level 3, level 4, level 6 (degree) and level 7 (master's degree). These standards show what an apprentice will be doing, and the skills required of them by job role.

We summarise each standard and the end-point assessment (EPA) methods and provide links to the standards. We also provide links to registered training providers and end-point assessment organisations, as well as an overview of the current funding situation.

For more information about apprenticeship standards, please visit the **UK Government 'search for apprenticeships'** website and the **Institute for Apprenticeships & Technical Education (IfATE)** website.

loti

About **loti**

The London Office of Technology and Innovation (LOTI) was established in July 2019 to help its members (currently 25 London boroughs, the Greater London Authority (GLA) and London Councils) to collaborate on projects that bring the best of digital and data innovation to improve public services and outcomes for Londoners.

LOTI commissioned CHR Solutions to produce this guide to support London local government teams with digital apprenticeships. The guide is up-to-date as of August 2022.

Unless boroughs have access to people with the right skills and experiences, none of the incredible opportunities concerning digital transformation will follow. In response, LOTI is increasing the recruitment support offer to our borough members.

To discover more from LOTI, visit www.loti.london.

2. Overview of digital apprenticeship standards

2.1 Key points and outputs

There are currently over 25 digital apprenticeship standards available for delivery in the UK. Full details can be found on the government-approved **Institute for Apprenticeships & Technical Education (IfATE)** website.

Key points about digital apprenticeship standards:

- Employers set standards to define occupational competence for specific occupations.

- Apprenticeship standards define:

  ○ what a fully competent person in that occupation should be able to do by the end of the apprenticeship

  ○ the minimum requirement for an apprentice to be assessed as being fully competent in that occupation

  ○ the outputs, in terms of duties, skills, knowledge and behaviours, that are relevant to the occupational role

- The apprentice's competence is assessed through an employer-defined end-point assessment (EPA) process.

- Some apprenticeships can include vendor qualifications, as defined by employers.

- Apprentices who pass their apprenticeship are awarded a grade and a completion certificate.

Key outputs for each defined apprenticeship occupation:

- Employer-defined standards of competence that provide a statement of what full competence looks like for that occupation.

- An employer-defined approach to end-point assessment (EPA) that sets out how the apprentice's competence will be assessed at the end of their apprenticeship.

Standards have been designed to be relevant and applicable to all employers of people in the particular occupation across a wide variety of sectors and different sizes of organisation. The assessment approach has also been designed to be appropriate, relevant and feasible in a broad range of contexts while also ensuring consistency across these contexts.

The **Institute for Apprenticeships & Technical Education (IfATE)** approves and reviews apprenticeship standards and assessment plans. Once approved and having been allocated a funding band, they are published on the IfATE website.

For each published standard, there are two key documents, which should be read together:

- The standard sets out the minimum and mandatory requirements of the apprenticeship. Any apprenticeship programme must include everything on the standard (although some employers may choose to do more) and apprentices must be able demonstrate the application of all the required skills, knowledge and behaviours in order to pass.

- The assessment plan sets out how the independent end-point assessment organisation will undertake the EPA and award a grade to the apprentice.

> The subset of digital apprenticeship standards currently approved for delivery in the UK is covered in section 3 of this guide.

2.2 Off-the-job learning

One of the most important apprenticeship rules is the requirement that every apprentice must spend at least 20% of their time doing off-the-job training.

Some employers have expressed concerns about this requirement but these seem to be due, in part at least, to a lack of understanding about what it means in practice.

How is off-the-job training defined?

Off-the-job training must amount to 20% of the apprentice's contracted employment hours across the whole apprenticeship.

It is up to the employer how they do this – it does not have to be the traditional day release model (the 20% could be in blocks or even hourly, for example) and it does not necessarily mean time spent in the classroom.

The key point is that it is time spent when the apprentice is not doing their normal work.

What kinds of activities are considered as off-the-job training?

- The teaching of theory (e.g. lectures, role playing, simulation exercises, online learning)

- Practical training (e.g. shadowing, mentoring, industry visits, working with a different team to expand experience, study time)

- Time that the apprentice spends with a mentor

What kinds of activities are not considered as off-the-job training?

- English and maths (this is funded separately)

- Progress reviews and on-programme assessment required for the apprenticeship standard

- Training that takes place outside the apprentice's paid working hours

2.3 Training provision

Training providers are listed on the **Register of Apprenticeship Training Providers (RoATP)** against the apprenticeship standard for which they are approved to deliver training.

There is a mix of local and national providers offering different types of apprenticeship training delivery engagement, including face to face, blended and online.

> You can find links to training providers for each digital apprenticeship standard in section 4 of this guide.

2.4 End-point assessment

The approach to end-point assessment (EPA) has been designed to be appropriate, relevant and feasible for apprentices employed in SMEs as well as larger organisations and to ensure consistency across a range of contexts. Employers have adopted a series of broad principles to inform their approach to end-point assessment.

Key principles

- Assessment is driven by the standards and covers the full competencies across knowledge, skills and behaviours.

- Assessment motivates the apprentice to achieve high standards in the quality of their work and encourages the development of sophisticated workplace behaviours to support their professional development.

- The assessment process is designed to add value to both apprentices and employers.

- The assessment will position the apprenticeship not just as a job but as the starting or continuation point for a career in the industry.

- The assessment tools are designed to replicate, as far as possible, live workplace scenarios and activity.

- An assessment methodology comprising a mixed set of tools enables the apprentice to play to their strengths and ensures that they are not disadvantaged by the restriction of one assessment method on one occasion only.

- Pass and distinction grades give the apprentice a clear goal to aim for and motivate them to achieve the highest standards.

How end-point assessment works in practice

This assessment occurs at the end of an apprenticeship (usually in the last 2-3 months) and is a service provided by an independent end-point assessment organisation.

End-point assessment (EPA) can only take place when the apprentice has completed all on-programme learning and produced a portfolio of evidence and when the employer determines that the apprentice is ready to be assessed.

It is made up of a minimum of two types of assessment, each of which contributes something different to the assessment process. These include:

- ✓ **Knowledge test**

- ✓ **Practical project**

- ✓ **Presentation**

- ✓ **Scenario demonstration**

- ✓ **Professional discussion**

You can find links to end-point assessment organisations for each digital apprenticeship standard in section 5 of this guide.

Grading is done by the independent assessor, based on a holistic assessment of everything they have seen. Details of grading criteria can be found in the assessment plan and/or occupational brief. Key points include:

- The grading takes place after the interview / professional discussion.

- It is based on all of the evidence that has been reviewed in the end-point assessment.

- There is only one grade for the apprenticeship.

- The purpose of grading is to motivate apprentices and to differentiate between those at the minimum level and those who are significantly above the minimum level.

3. Digital apprenticeship standards

3.1 Roles supported

The digital apprenticeship standards (levels 3, 4, 6 and 7) support a number of digital roles. You can find further details about each standard by clicking on the role in the list next.

LEVEL 3	**LEVEL 4**
LEVEL 6	**LEVEL 7**

LEVEL 3

- Data technician
- Software development technician
- Cyber security technician
- Digital support technician
- Network cable installer
- IT solutions technician
- Information communications technician

LEVEL 4

- Data analyst
- Data protection and information governance practitioner
- Business analyst
- Software developer
- Software tester
- DevOps engineer
- Digital accessibility specialist
- Cyber security technologist
- Applications support lead
- Network engineer
- Digital community manager
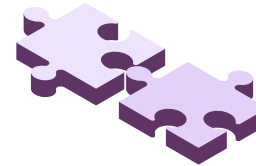
LEVEL 6

- Digital and technology solutions professional (integrated degree)
- Digital user experience (UX) professional (integrated degree)
- Data scientist (integrated degree)
- Creative digital design professional (integrated degree)
- Cyber security technical professional (integrated degree)

LEVEL 7

- Digital and technology solutions specialist (integrated degree)
- Artificial intelligence (AI) data specialist
- Game programmer

3.2 Table 1: Digital apprenticeship standards by theme and level

TOPIC	LEVEL 3	LEVEL 4	LEVEL 6 (Degree apprenticeship)	LEVEL 7 (MSc apprenticeship)
✓ Multi-pathway				Digital and technology solutions specialist (integrated degree)
✓ Data	Data technician	Data analyst	Digital and technology solutions professional (data analyst)	Artificial intelligence (AI) data specialist
		Data protection and information governance practitioner	Data scientist	Game programmer
✓ Business analysis		Business analyst	Digital and technology solutions professional (business analyst)	
✓ Software development	Software development technician	Software developer	Digital and technology solutions professional (software engineer)	
		Software tester		
		DevOps engineer		
✓ User centred design		Digital accessibility specialist	Digital user experience (UX) professional (integrated degree)	
✓ Creative			Creative digital design professional (integrated degree)	
✓ Cyber security	Cyber security technician	Cyber security technologist	Digital and technology solutions professional (cyber security)	
			Cyber security technical professional	
✓ IT support	Digital support technician	Applications support lead		
✓ Infrastructure	Network cable installer	Network engineer		
	IT solutions technician			
✓ Telecoms	Information communications technician			
✓ Digital engagement		Digital community manager		

3.3 Level 3 standards

Data technician apprenticeship
(Level 3)

Last updated on 18/01/2022

This teaches the apprentice how to source, format and present data securely in a relevant way for analysis using basic methods.

The apprentice will also learn about current and future technologies that underpin the storage, processing, analysis and sharing of data.

The end-point assessment (EPA) consists of a scenario demonstration with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

On completion of this apprenticeship, progression routes include:

- Level 4 Data analyst

- Level 6 Data scientist (integrated degree)

- Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **data technician apprenticeship** on the IfATE website.
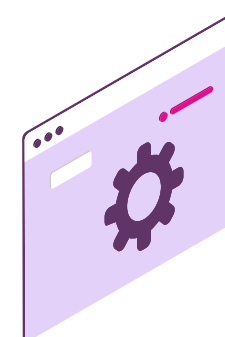
Software development technician apprenticeship
(Level 3)
Last updated on 05/04/2022

This equips the apprentice with the knowledge and skills to operate as a junior member of a software development team.

It includes building simple software components for web, mobile or desktop applications that can be used by the team as part of larger software development projects or by end users.

The apprentice will also learn how to interpret simple design requirements for discrete components of the project under supervision.

The end-point assessment (EPA) consists of a knowledge test (two units) and a presentation and interview with the independent assessor (two units).

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 DevOps engineer
- Level 4 Software developer
- Level 4 Software tester
- Level 6 Digital and technology solutions specialist (integrated degree)

Find out more about the **software development technician apprenticeship** on the IfATE website.
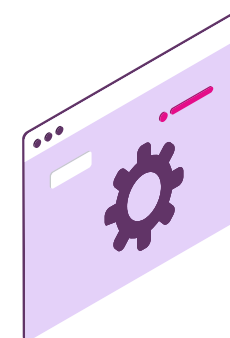
Cyber security technician apprenticeship
(Level 3)

Last updated on 01/04/2021

This trains the apprentice to implement a series of technical, procedural and physical controls to monitor, detect and respond to a wide range of cyber security threats and maintain business continuity.

The apprentice will also learn about cyber risk and mitigation with a focus on maintaining the confidentiality, integrity and availability of digital data and will use their skills and experiences to feed into policy decisions and enhance cyber security awareness within the business.

The end-point assessment (EPA) consists of a scenario demonstration with questioning, a professional discussion underpinned by a portfolio of evidence and a knowledge test.

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 Cyber security technologist

- Level 6 Digital and technology solutions professional (integrated degree)

- Level 6 Cyber security technical professional (integrated degree)

Find out more about the **cyber security technician apprenticeship** on the IfATE website.
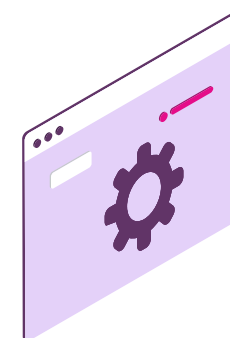
Digital support technician apprenticeship
(Level 3)

Last updated on 04/08/2022

This develops the apprentice to help people effectively use digital office technologies, productivity software and digital communications, including collaborative technologies and digital information systems.

It is an options-based apprenticeship with optional pathways for a) Digital applications technician and b) Digital service technician.

The end-point assessment (EPA) consists of a project with a report and a professional discussion with the independent assessor underpinned by a portfolio of evidence. The project will be based on suggested project titles and detailed specification.

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 Network engineer
- Level 4 Cyber security technologist
- Level 6 Digital and technology solutions specialist (integrated degree)

Find out more about the **digital support technician apprenticeship** on the IfATE website.
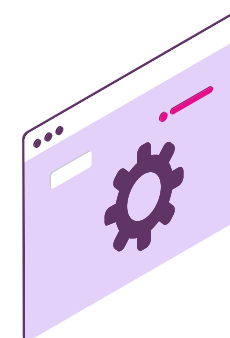
Network cable installer
(Level 3)

Last updated on 18/01/2022

This teaches the apprentice to install, terminate, test and certify network cable infrastructure components in accordance with national and international industry standards.

It enables all types of digital devices, including computers, servers, smart devices, security equipment, wireless access points, access control, building management systems and lighting systems to communicate between each other, internally, nationally and globally.

The end-point assessment (EPA) consists of a practical demonstration with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 Network engineer

- Level 6 Digital and technology solutions specialist (integrated degree)

Find out more about the **network cable installer apprenticeship** on the IfATE website.
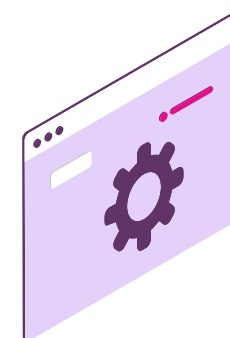
IT solutions technician apprenticeship
(Level 3)

Last updated on 18/02/2019

This supports the apprentice to design, develop, test and implement IT solutions, including hardware infrastructure (e.g. servers and networks) and software (e.g. operating systems, middleware and applications).

It is an options-based apprenticeship with optional pathways for a) IT hardware solutions technician and b) IT software solutions technician.

The end-point assessment (EPA) consists of a knowledge test and project presentation with an interview.

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 DevOps engineer

- Level 4 Software developer

- Level 4 Software tester

- Level 4 Network engineer

- Level 6 Digital and technology solutions specialist (integrated degree)

Find out more about the **IT solutions technician apprenticeship** on the IfATE website.
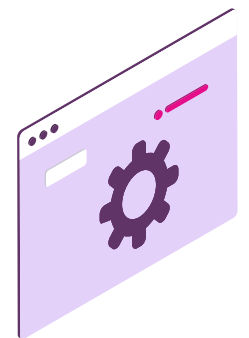
Information communications technician apprenticeship
(Level 3)

Last updated on 14/05/2021

This trains the apprentice to implement and maintain IT systems for their business.

This is an options-based apprenticeship with optional pathways for a) Support technician, b) Network technician and c) Digital communications technician.

The end-point assessment (EPA) consists of a professional discussion underpinned by a portfolio of evidence, along with a project report with questioning. The project may be based on a specific problem, a recurring issue, an idea/opportunity or providing a service.

LEVEL 3

On completion of this apprenticeship, progression routes include:

- Level 4 Network engineer

- Level 4 Cyber security technologist

- Level 6 Digital and technology solutions specialist (integrated degree)

Find out more about the **information communications technician apprenticeship** on the IfATE website.
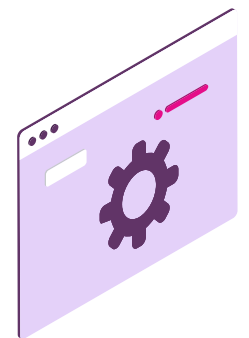
3.4 Level 4 standards

Data analyst apprenticeship
(Level 4)

Last updated on 01/06/2021

This develops the apprentice so they can extract, manipulate, model, visualise and present data to provide business insight.

The end-point assessment (EPA) consists of a project with presentation and questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Data scientist (integrated degree)

- Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **data analyst apprenticeship** on the IfATE website.

Data protection and information governance practitioner apprenticeship
(Level 4)

Last updated on 30/03/2022

This trains the apprentice to manage personal and commercial data processing and give regulatory and technical advice and guidance providing assurance to key stakeholders and regulators of compliance with information governance (IG) and data protection (DP) requirements.

The end-point assessment (EPA) consists of a project report with a presentation and questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Digital and technology solutions professional (integrated degree)

- Level 6 Data scientist (integrated degree)

Find out more about the **data protection and information governance practitioner apprenticeship** on the IfATE website.

Business analyst apprenticeship
(Level 4)

Last updated on 01/06/2021

This supports the apprentice to conduct business modelling, identify system requirements and determine and present solutions that deliver business improvement and benefits.

The end-point assessment (EPA) consists of a project proposal with a presentation and questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

• Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **business analyst apprenticeship** on the IfATE website.

Software developer apprenticeship
(Level 4)

Last updated on 14/07/2021

This equips the apprentice with the knowledge and skills to become a competent software developer, working across the front end, logic and data layers.

The end-point assessment (EPA) consists of a work-based project and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **software developer apprenticeship** on the IfATE website.

Software tester apprenticeship
(Level 4)

Last updated on 28/07/2022 (new standard introduced)

This teaches the apprentice to conduct various testing activities across the software development lifecycle to ensure the software meets the organisation's functional, security, performance and usability requirements and other relevant quality requirements.

The end-point assessment (EPA) consists of scenario-based tests with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **software tester apprenticeship** on the IfATE website.

DevOps engineer apprenticeship
(Level 4)

Last updated on 12/03/2020

This trains the apprentice in the practices and process of developing, testing and deploying working software faster, more efficiently and more reliably through the automation and harmonisation of systems and tools.

The apprenticeship provides insights into software development practices, including the required programming/scripting skills, and an understanding of live operations at the deployment end – on premises or cloud infrastructure, source control management and CI/CD implementation.

The end-point assessment (EPA) consists of a project with practical assessment and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

• Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **DevOps engineer apprenticeship** on the IfATE website.

Digital accessibility specialist apprenticeship
(Level 4)

Last updated on 07/07/2021

This supports the apprentice to provide advice on accessibility best practice so they can help organisations to meet organisational, national and international accessibility standards and collaborate with others to ensure an inclusive user experience and compliance with relevant legislation.

The end-point assessment (EPA) consists of a work-based project report and presentation, a knowledge test and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Digital and technology solutions professional (integrated degree)

- Level 6 Digital user experience (UX) professional (integrated degree)

Find out more about the **digital accessibility specialist apprenticeship** on the IfATE website.

Cyber security technologist apprenticeship
(Level 4)

Last updated on 04/05/2021

This enables the apprentice to implement a series of technical, procedural and physical controls to monitor, detect and respond to a wide range of cyber security threats.

The apprentice will be trained in cyber risk and mitigation, which includes maintaining the confidentiality, integrity and availability of digital data. They will use their skills to feed into policy decisions and enhance cyber security awareness within the business.

This is an options-based apprenticeship with optional pathways for a) Cyber security engineer, b) Cyber risk analyst and c) Cyber defender & responder.

The end-point assessment (EPA) consists of a scenario demonstration with questioning, a project report, a knowledge test and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

- Level 6 Digital and technology solutions professional (integrated degree)

- Level 6 Cyber security technical professional (integrated degree)

Find out more about the **cyber security technologist apprenticeship** on the IfATE website.

Applications support lead apprenticeship
(Level 4)

Last updated on 9/11/2021

This equips the apprentice with the knowledge and skills to provide tactical advice, training and support on core technology applications (both hardware and software) to internal colleagues and external clients/customers in order to enhance and enable the delivery of application-based products and services.

The end-point assessment (EPA) consists of a project report with questions, a knowledge test and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

• Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **applications support lead apprenticeship** on the IfATE website.

Network engineer apprenticeship
(Level 4)

Last updated on 01/06/2021

This develops the apprentice so they can design, build and secure multi-vendor networks and understand how networking infrastructure is installed, secured and maintained (both physical and software defined networks).

The end-point assessment (EPA) consists of a simulated assessment and questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

Digital community manager apprenticeship
(Level 4)

Last updated on 30/04/2021

This trains the apprentice to facilitate direct communication online between the end user or customer and the organisation.

The end-point assessment (EPA) consists of a scenario test with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 4

On completion of this apprenticeship, progression routes include:

• Level 6 Digital and technology solutions professional (integrated degree)

Find out more about the **digital community manager apprenticeship** on the IfATE website.

3.5 Level 6 standards

Digital and technology solutions professional (integrated degree) apprenticeship
(Level 6)

Last updated on 13/05/2019 (in revision)

This provides the apprentice with the broad technical understanding to operate as part of a wider team working with specialists in the analysis, design, build, evaluation and security of software, data solutions, services and networks.

The apprenticeship includes learning how to create business cases, work with end users and build technology solutions.

This is an options-based apprenticeship. In addition to the core programme, there are six optional pathways for specialisations in software engineering, data analysis, network engineering, business analysis, IT consulting and cyber security analysis.

The end-point assessment (EPA) consists of a work-based project report and panel presentation underpinned by a portfolio of evidence.

LEVEL 6

On completion of this apprenticeship, progression routes include:

- Level 7 Digital and technology solutions specialist (integrated degree)

- Level 7 Artificial intelligence (AI) data specialist

- Level 7 Game programmer

Find out more about the **digital and technology solutions professional apprenticeship** on the IfATE website.
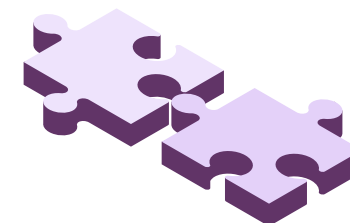
Digital user experience (UX) professional (integrated degree) apprenticeship
(Level 6)

Last updated on 16/02/2022

This enhances the apprentice's fundamental skills in user experience (UX) design and management.

It includes how to investigate, analyse and design online interactions and develop the skills to deliver, improve and optimise digital products and services.

The end-point assessment (EPA) consists of a work-based project report and presentation with questioning, and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 6

On completion of this apprenticeship, progression routes include:

- Level 7 Digital and technology solutions specialist (integrated degree)

Find out more about the **digital user experience (UX) professional apprenticeship** on the IfATE website.

Data scientist (integrated degree) apprenticeship
(Level 6)

Last updated on 17/08/2018

This teaches the apprentice to address real-world data challenges and prepares them to confidently work with different types of data, formats and models from a variety of sources.
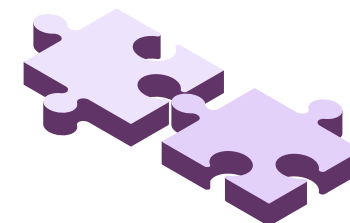
The end-point assessment (EPA) consists of a knowledge test, work-based project report and presentation with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 6

On completion of this apprenticeship, progression routes include:

- Level 7 Digital and technology solutions specialist (integrated degree)

- Level 7 artificial intelligence (AI) data specialist

Find out more about the **data scientist apprenticeship** on the IfATE website.
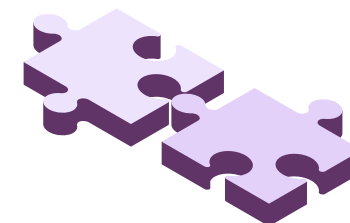
Creative digital design professional (integrated degree) apprenticeship
(Level 6)

Last updated on 04/02/2022

This trains the apprentice to produce compelling digitally-enabled design solutions to internal and/or external clients across a range of sectors and for a range of contexts.

The apprentice will implement design concepts to develop and communicate new products and to provide design solutions utilising digital design technologies. They will be responsible for creating digital design solutions for e.g. online services, installations, devices, interactive services and mobile applications.

The end-point assessment (EPA) consists of a project report and presentation with questioning and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 6

On completion of this apprenticeship, progression routes include:

- Level 7 Digital and technology solutions specialist (integrated degree)

Find out more about the **creative digital design professional apprenticeship** on the IfATE website.
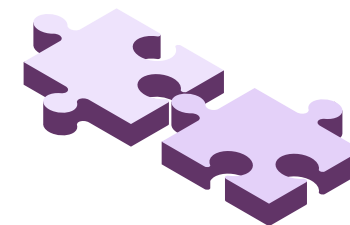
Cyber security technical professional (integrated degree) apprenticeship
(Level 6)

Last updated on 22/11/2021

This equips the apprentice with the knowledge and skills to research, analyse, model, assess and manage cyber security risks.

They will also design, develop, justify, manage and operate secure solutions and detect and respond to incidents, working in accordance with applicable laws, regulations, standards and ethics.

The end-point assessment (EPA) consists of a practical test and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

LEVEL 6

On completion of this apprenticeship, progression routes include:

- Level 7 Digital and technology solutions specialist (integrated degree)

Find out more about the **cyber security technical professional apprenticeship** on the IfATE website.
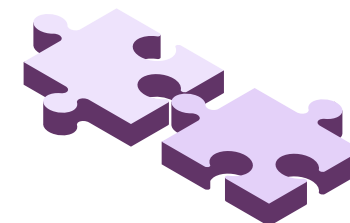
3.6 Level 7 standards

Digital and technology solutions specialist (integrated degree) apprenticeship
(Level 7)

Last updated on 13/05/2019

This will help transform the apprentice from a technical professional into a technical specialist. It will build leadership and technology management skills while deepening knowledge of the chosen specialist route.

This is an options-based apprenticeship. In addition to the core programme, there are 11 optional pathways for Software engineering specialist, Data analytics specialist, Digital business and enterprise systems architecture specialist, System test and assurance specialist, IT strategy specialist, IT business analysis specialist, Network engineering specialist, IT operations management specialist, IT project management specialist, Cyber security technology specialist and IT / digital futures management specialist.

LEVEL 7

**The end-point assessment (EPA) consists of a work-based project report and a professional discussion with the independent assessor underpinned by a portfolio of evidence.**

Find out more about the **digital and technology solutions specialist apprenticeship** on the IfATE website.

Artificial intelligence (AI) data specialist (integrated degree) apprenticeship
(Level 7)

Last updated on 30/04/2021

This teaches the apprentice to understand the statistical and mathematical foundations and gain advanced practical knowledge of AI and machine learning methodologies applied to complex datasets to meet business objectives.

LEVEL 7

The end-point assessment (EPA) consists of a work-based project report and questions, a technical test and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

Find out more about the **artificial intelligence (AI) data specialist apprenticeship** on the IfATE website.

Game programmer (integrated degree) apprenticeship
(Level 7)

Last updated on 10/08/2021

This trains the apprentice to create dependable and efficient gaming software within the constraints of real-time graphical environments running on contemporary gaming platforms. This includes gameplay mechanics, asset pipelines and custom technologies.

The apprentice will build on a core knowledge of games development and develop skills in both game software programming and game technology programming.

The end-point assessment (EPA) consists of a work-based project presentation and a professional discussion with the independent assessor underpinned by a portfolio of evidence.

Find out more about the **game programmer apprenticeship** on the IfATE website.

4. Digital apprenticeship training providers

LEVEL 3

- Data technician
(49 training providers)
- Software development technician
(66 training providers)
- Cyber security technician
(31 training providers)
- Digital support technician
(73 training providers)
- Network cable installer
(7 training providers)
- IT solutions technician
(50 training providers)
- Information communications technician
(120 training providers)

LEVEL 4

- Data analyst
(94 training providers)
- Data protection and information governance practitioner
(1 training provider)
- Business analyst
(33 training providers)
- Software developer
(88 training providers)
- Software tester
(21 training providers)
- DevOps engineer
(30 training providers)
- Digital accessibility specialist
(1 training provider)
- Cyber security technologist
(18 training providers)
- Applications support lead
(5 training providers)
- Network engineer
(72 training providers)
- Digital community manager
(7 training providers)

LEVEL 6

- Digital and technology solutions professional (integrated degree)
(57 training providers)
- Digital user experience (UX) professional (integrated degree)
(4 training providers)
- Data scientist (integrated degree)
(13 training providers)
- Creative digital design professional (integrated degree)
(3 training providers)
- Cyber security technical professional (integrated degree)
(8 training providers)

LEVEL 7

- Digital and technology solutions specialist (integrated degree)
(27 training providers)
- Artificial intelligence (AI) data specialist
(6 training providers)
- Game programmer
(14 training providers)

5. End-point assessment organisations

All apprenticeships finish with an end-point assessment (EPA). This is completed by a third party end-point assessment organisation that evaluates all of the work completed throughout the duration of the apprenticeship.

LEVEL 3

- Data technician
  (11 EPA organisations)
- Software development technician
  (2 EPA organisations)
- Cyber security technician
  (1 EPA organisation)
- Digital support technician
  (6 EPA organisations)
- Network cable installer
  (3 EPA organisations)
- IT solutions technician
  (2 EPA organisations)
- Information communications technician
  (5 EPA organisations)

LEVEL 4

- Data analyst
  (10 EPA organisations)
- Data protection and information governance practitioner
  (2 EPA organisations)
- Business analyst
  (3 EPA organisations)
- Software developer
  (3 EPA organisations)
- Software tester
  (2 EPA organisations)
- DevOps engineer
  (2 EPA organisations)
- Digital accessibility specialist
  (1 EPA organisation)
- Cyber security technologist
  (3 EPA organisations)
- Applications support lead
  (1 EPA organisation)
- Network engineer
  (4 EPA organisations)
- Digital community manager
  (2 EPA organisations)

LEVEL 6

- **Digital and technology solutions professional (integrated degree) (46 EPA organisations)**

- **Digital user experience (UX) professional (integrated degree) (2 EPA organisations)**

- **Data scientist (integrated degree) (5 EPA organisations)**

- **Creative digital design professional (integrated degree) (2 EPA organisations)**

- **Cyber security technical professional (integrated degree) (7 EPA organisations)**

LEVEL 7

- **Digital and technology solutions specialist (integrated degree) (19 EPA organisations)**

- **Artificial intelligence (AI) data specialist (1 EPA organisation)**

- **Game programmer (2 EPA organisations)**

6. Funding of digital apprenticeships

6.1 Overview

The funding for apprenticeship standards is set by the **Institute for Apprenticeships & Technical Education (IfATE)**. It covers the cost of the training and the cost of the end-point assessment.

The current funding rates for digital apprenticeship standards are set out in Table 2. Employers should be aware of the funding levels for each apprenticeship to ensure they get value for money when discussing apprenticeship provision with approved training providers.

How the current funding works in practice

- There is a 90% contribution from the Government to the cost of training for employers who do not pay the Apprenticeship Levy.

- The upper limit of the funding bands caps the maximum price that the Government will 'co-invest' where an employer does not pay the Apprenticeship Levy.

- The upper limit of each funding band also caps the maximum amount of funds an employer who does pay the Apprenticeship Levy can use towards an individual apprenticeship.

- There is a 100% contribution from the Government to the cost of training for employers with fewer than 50 employees who do not pay the Apprenticeship Levy and who take on apprentices who are aged 16 to 18, 19 to 24-year-old care leavers or 19 to 24-year-olds who have an Education, Health and Care (EHC) Plan.

- There is a further £1,000 payment from the Government to employers and training providers when they take on 16 to 18-year-olds or 19 to 24-year-old care leavers or 19 to 24-year olds who have an Education, Health and Care (EHC) Plan.

6.2 The Apprenticeship Levy

The Apprenticeship Levy was introduced in May 2017.

The Government's intention is that the way it funds apprenticeships in England will simplify some of the current arrangements and make it easier for employers of all sizes to choose the apprenticeship training they want to purchase and have more control over designing and paying for it.

Funding will follow employer choice so apprenticeship providers will have to be responsive to what employers need.

The Apprenticeship Levy is paid by employers with a pay bill of over £3 million. It is paid through PAYE at a rate of 0.5% of the total annual pay bill. Employers who pay the levy can create an Apprenticeship Service account on the **gov.uk** website to manage apprenticeships.

The funds created can be spent on apprenticeship training. Funds appear in the employer account monthly and the Government applies a 10% top-up. The funding can only be used on apprenticeship training and assessment.

Most employers do not pay the Apprenticeship Levy. These employers will be required to make a 10% contribution to the cost of the training and assessment that they select. The Government will pay the rest (90%) up to the maximum amount of government funding available for that apprenticeship.

Employers pay this directly to their apprenticeship provider and can spread it over the lifetime of the apprenticeship.

6.3 Table 2: Digital apprenticeship standards funding rates

Name of apprenticeship standard	Apprenticeship standard reference number	'Approved for delivery' date	Level	Maximum funding (£)	Typical duration (months)
Software developer	ST0116	12/11/2014	4	£18,000	24
Network engineer	ST0127	12/11/2014	4	£17,000	30
Digital and technology solutions professional (integrated degree)	ST0119	26/03/2015	6	£25,000	36
Data analyst	ST0118	23/03/2016	4	£15,000	24
Software tester	ST0129	21/04/2016	4	£18,000	24
Software development technician	ST0128	16/12/2016	3	£15,000	18
Business analyst	ST0117	31/03/2017	4	£18,000	18
Digital and technology solutions specialist (integrated degree)	ST0482	07/08/2018	7	£21,000	18
Data scientist (integrated degree)	ST0585	17/08/2018	6	£19,000	36
Cyber security technical professional (integrated degree)	ST0409	24/09/2018	6	£24,000	48
IT solutions technician	ST0505	18/02/2019	3	£13,000	18
Digital support technician	ST0120	11/04/2019	3	£13,000	15
Network cable installer	ST0485	23/04/2019	3	£9,000	12
Digital community manager	ST0345	14/08/2019	4	£13,000	24
Digital user experience (UX) professional (integrated degree)	ST0470	03/02/2020	6	£24,000	48
Creative digital design professional (integrated degree)	ST0625	03/02/2020	6	£25,000	36

Contd.

Name of apprenticeship standard	Apprenticeship standard reference number	'Approved for delivery' date	Level	Maximum funding (£)	Typical duration (months)
DevOps engineer	ST0825	12/03/2020	4	£17,000	24
Cyber security technician	ST0865	13/05/2020	3	£11,000	18
Artificial intelligence (AI) data specialist	ST0763	13/05/2020	7	£17,000	24
Data technician	ST0795	10/07/2020	3	£12,000	24
Cyber security technologist (2021)	ST1021	04/05/2021	4	£18,000	24
Information communications technician	ST0973	04/05/2021	3	£15,000	18
Digital accessibility specialist	ST0863	01/07/2021	4	£16,000	24
Game programmer	ST0953	03/08/2021	7	£19,000	24
Applications support lead	ST0949	12/11/2021	4	£17,000	24
Data protection and information governance practitioner	ST0967	30/03/2022	4	£10,000	18

Source: **Education and Skills Funding Agency**

6.4 Additional funding support

In addition to the funding available through the funding bands, there are **four additional potential contributions**.

Funding for 16 to 18-year-olds

The Government will pay £1,000 to employers and a further £1,000 to training providers if they train a 16 to 18-year-old apprentice.

Funding for additional learning support

The Government will pay training providers up to £150 per month to support learners with special needs.

Disadvantaged young people

The Government will pay £1,000 to employers and a further £1,000 to training providers if they train 19 to 24-year-old care leavers or 19 to 24-year-olds who have an Education, Health and Care (EHC) Plan.

Funding for English and maths training

The Government will pay training providers £471 to help apprentices gain the minimum standard of Level 2 in English and the same to reach Level 2 in Maths (if not already attained).

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About LOTI

The London Office of Technology and Innovation (LOTI) was established in July 2019 to help its members (currently 24 London boroughs, the Greater London Authority (GLA), and London Councils) to collaborate on projects that bring the best of digital and data innovation to improve public services and outcomes for Londoners.

Read more at: loti.london