techskills

CAREERS COACHES AND ADVISERS

Cloud & Infrastructure careers: a guide for careers coaches and advisers

Scalability & Resilience Foundations

Figures checked from 11 July 2026. Built from the TechSkills Career Matrix.

About this guide

This guide is for careers coaches and advisers, including DWP work coaches, who help adults move into Cloud & Infrastructure work.

It is built from the TechSkills Career Matrix and Career Planner. Every pay, hiring and funding figure shows its source and the date it was checked. Where our data has a gap, the guide says so.

Areas of work covered	8
Apprenticeship standards listed	4
Produced by	TechSkills, techskills.org

Cloud & Infrastructure at a glance

No.	Area of work	What it covers	Example roles	Pay range
01	Cloud Engineering	Designing and managing virtual environments on AWS, Azure, or GCP.	Cloud Engineer, Cloud Architect, Platform Engineer, FinOps Analyst	£35,000 to £117,500+
02	DevOps & Automation	The bridge between development and operations, automating the software lifecycle.	DevOps Engineer, SRE (Reliability), Automation Lead, Build Engineer	£40,500 to £85,000+
03	Systems & Virtualisation	Managing the core operating systems and VMs that run applications.	Systems Administrator, Virtualisation Lead, Storage Engineer, Database Administrator	£35,750 to £75,000
04	Data Centre Ops	The physical world of data centres, cables, and power systems.	Data Centre Technician, Hardware Engineer, DC Ops Manager, Fibre Technician	£35,000 to £100,000
05	Solutions Architecture	Connecting business needs to technical infrastructure blueprints.	Solutions Architect, Enterprise Architect, Infrastructure Strategist	£54,481 to £100,000
06	Emerging Tech	Pioneering the next wave of compute, from Edge to Quantum.	Edge Architect, Sustainable Tech Lead, Quantum Infra Lead	£45,000 to £93,550+
07	Site Reliability & Observability	Building the monitoring, alerting, and incident-response practices that keep complex systems reliable at scale.	Site Reliability Engineer, Observability Engineer, Incident Manager, Performance Engineer	£52,500 to £85,000
08	Cloud Security & Compliance	Securing cloud environments and proving compliance with regulatory and industry standards as infrastructure scales.	Cloud Security Engineer, Compliance Analyst, FinOps & GRC Lead, Cloud Governance Manager	£50,000 to £84,750+

Pay ranges come from job advert data. The source for each range is shown with the area of work in the next section.

The areas of work, one by one

01 Cloud Engineering

What it is	Designing and managing virtual environments on AWS, Azure, or GCP.
Example roles	Cloud Engineer, Cloud Architect, Platform Engineer, FinOps Analyst
Skills used	AWS/Azure; Terraform; Python; Cloud Networking; IAM
Who it suits	Analytical minds who enjoy building complex, logical systems in the cloud.
Example of the work	Migrating a legacy retail backend to a serverless AWS architecture.
What shows someone can do it	Ability to design and provision cloud infrastructure that scales reliably as demand grows.
Sectors that hire	Financial Services, Retail & E-commerce, Technology & Software, Media & Entertainment, Government & Public Sector
Pay	£35,000 to £117,500+. Source: median junior Cloud Engineer to 90th-percentile Cloud Architect, IT Jobs Watch.

02 DevOps & Automation

What it is	The bridge between development and operations, automating the software lifecycle.
Example roles	DevOps Engineer, SRE (Reliability), Automation Lead, Build Engineer
Skills used	Docker/K8s; Jenkins/GitHub Actions; Ansible; Linux; Scripting
Who it suits	Automation enthusiasts who hate doing the same manual task twice.
Example of the work	Building a CI/CD pipeline that scales an app to 1M users automatically.
What shows someone can do it	Ability to build automated pipelines that ship software safely and repeatedly, without manual intervention.
Sectors that hire	Technology & Software, Financial Services, Retail & E-commerce, Telecommunications, Media & Entertainment
Pay	£40,500 to £85,000+. Source: median, Build Engineer to Lead DevOps Engineer / Site Reliability Engineer, IT Jobs Watch.

Apprenticeship route: DevOps Engineer, Apprenticeship Route

What it is	Build and run the automated pipelines that get real software safely in front of real users, for a real employer, from day one, rather than studying software engineering theory first.
Example roles	DevOps Engineer Apprentice, Junior Build Engineer, Associate SRE

What suits this route	Comfortable learning on the job with structured mentoring rather than lecture based study; Wants to earn a wage and avoid student debt while training; Can meet real employer entry requirements, typically GCSEs or A levels rather than a completed degree
Pay	£24,000 to £52,000. Source: DevOps apprentice to newly-qualified DevOps Engineer, Glassdoor/Payscale UK.

Standard	Reference	Level	Typical length	Checked
DevOps Engineer	ST0825	Level 4	24 months	10 August 2026

03 Systems & Virtualisation

What it is	Managing the core operating systems and VMs that run applications.
Example roles	Systems Administrator, Virtualisation Lead, Storage Engineer, Database Administrator
Skills used	Linux/Windows Admin; VMware/KVM; Storage Mgmt; Scripting
Who it suits	Methodical thinkers who enjoy the 'engine room' of IT.
Example of the work	Upgrading a cluster of 500 virtual servers with zero downtime.
What shows someone can do it	Ability to keep core servers and virtual machines running reliably with minimal downtime.
Sectors that hire	Financial Services, Government & Public Sector, Healthcare & Life Sciences, Manufacturing & Engineering, Higher Education
Pay	£35,750 to £75,000. Source: median, IT Systems Administrator to Senior Database Administrator, IT Jobs Watch.

Apprenticeship route: IT Solutions Technician, Apprenticeship Route

What it is	Develop, implement and maintain real IT solutions, networks, operating systems and applications, for a real employer, then specialise from there into systems administration, DevOps, networking or software.
Example roles	IT Solutions Technician Apprentice, Junior Systems Administrator, IT Support Technician
What suits this route	Comfortable learning on the job with structured mentoring rather than lecture based study; Wants to earn a wage and avoid student debt while training; Can meet real employer entry requirements, typically GCSEs rather than a completed degree
Pay	£18,500 to £32,000. Source: IT Solutions Technician apprentice to newly-qualified Systems Administrator, Glassdoor/Payscale UK.

Standard	Reference	Level	Typical length	Checked
IT Solutions Technician	ST0505	Level 3	18 months	10 August 2026

04 Data Centre Ops

What it is	The physical world of data centres, cables, and power systems.
Example roles	Data Centre Technician, Hardware Engineer, DC Ops Manager, Fibre Technician
Skills used	Hardware; Data Centre Design; Cabling; HVAC; Power
Who it suits	Practical people who enjoy working with physical technology and hardware.
Example of the work	Building out a new Tier-4 data centre hall for a global cloud provider.
What shows someone can do it	Ability to specify, install and maintain the physical hardware, power and cooling everything else depends on.
Sectors that hire	Telecommunications, Technology & Software, Financial Services, Energy & Utilities, Government & Public Sector
Pay	£35,000 to £100,000. Source: median, Fibre Engineer to Data Centre Manager, IT Jobs Watch.

Apprenticeship route: Data Centre Operations

What it is	Install, service and maintain the physical infrastructure behind every cloud platform: server hardware, cooling systems, backup power and structured cabling. The site-based, hands-on side of "the cloud".
Example roles	Data Centre Support Technician, Electrical Service & Maintenance Technician, Information Communications Technician
What suits this route	Comfortable with shift-based, site-based facilities work; Methodical fault-finding on electrical and mechanical plant; Safety-conscious around high-voltage and critical power systems
Pay	£34,073 to £41,111. Source: median, equipment installer to electrical maintenance technician.

Standard	Reference	Level	Typical length	Checked
Information Communications Technician	ST0973	Level 3	18 months	30 July 2026
Refrigeration Air Conditioning and Heat Pump Engineering Technician	ST0322	Level 3	36 months	30 July 2026

05 Solutions Architecture

What it is	Connecting business needs to technical infrastructure blueprints.
Example roles	Solutions Architect, Enterprise Architect, Infrastructure Strategist

Skills used	Strategy; Cost Modelling; Integration Design; Stakeholders
Who it suits	Big-picture thinkers who can bridge the gap between CEO and Engineer.
Example of the work	Designing the global infrastructure for a new digital bank.
What shows someone can do it	Ability to translate a business requirement into a costed, workable infrastructure blueprint.
Sectors that hire	Financial Services, Government & Public Sector, Professional & Consulting Services, Technology & Software, Retail & E-commerce
Pay	£54,481 to £100,000. Source: ONS median IT solutions architects/designers to IT Jobs Watch median Principal Solutions/Enterprise Architect.

06 Emerging Tech

What it is	Pioneering the next wave of compute, from Edge to Quantum.
Example roles	Edge Architect, Sustainable Tech Lead, Quantum Infra Lead
Skills used	Edge Compute; Quantum Platforms; Green Tech; Web3 Infra
Who it suits	Early adopters who want to build the foundations of tomorrow.
Example of the work	Deploying a mesh of 10,000 edge compute nodes for a smart city.
What shows someone can do it	Ability to evaluate and pilot next-generation compute platforms before they become mainstream.
Sectors that hire	Technology & Software, Energy & Utilities, Telecommunications, Financial Services, Manufacturing & Engineering
Pay	£45,000 to £93,550+. Source: proxy: Sustainability Analyst median to 90th-percentile Edge Computing postings, IT Jobs Watch/Glassdoor, no dedicated listing for niche 'Quantum Infra Lead'.

07 Site Reliability & Observability

What it is	Building the monitoring, alerting, and incident-response practices that keep complex systems reliable at scale.
Example roles	Site Reliability Engineer, Observability Engineer, Incident Manager, Performance Engineer
Skills used	SLOs/SLIs; Monitoring and Alerting; Incident Management; Chaos Engineering
Who it suits	Calm operators who thrive when things go wrong and need fixing fast.
Example of the work	Minimises downtime and mean-time-to-recovery for services millions depend on.
What shows someone can do it	Ability to detect and resolve system issues before customers ever notice them.

Sectors that hire	Technology & Software, Financial Services, Retail & E-commerce, Telecommunications, Media & Entertainment
Pay	£52,500 to £85,000. Source: median, Observability-keyword postings to Site Reliability Engineer (London), IT Jobs Watch, no dedicated 'Observability Engineer' page.

08 Cloud Security & Compliance

What it is	Securing cloud environments and proving compliance with regulatory and industry standards as infrastructure scales.
Example roles	Cloud Security Engineer, Compliance Analyst, FinOps & GRC Lead, Cloud Governance Manager
Skills used	Cloud Security Posture Mgmt; IAM Governance; Compliance Frameworks; Cost and Risk Controls
Who it suits	Detail-oriented engineers who enjoy translating regulation into technical controls.
Example of the work	Enables rapid cloud adoption without exposing the organisation to risk or regulatory breach.
What shows someone can do it	Ability to prove, with evidence, that cloud infrastructure meets its regulatory obligations.
Sectors that hire	Financial Services, Government & Public Sector, Healthcare & Life Sciences, Insurance, Technology & Software
Pay	£50,000 to £84,750+. Source: median Compliance Analyst to 90th-percentile GRC/Cloud Security roles, IT Jobs Watch.

Routes into the field

Route	What it is	Cost and pay
Apprenticeships	Earn while they train through structured learning that combines workplace experience with recognised development.	their employer (or the government, via the apprenticeship levy and co-investment) pays for all their training and assessment costs directly to the provider, they are never billed for tuition, and they don't take out a loan for it. Apprentices are paid at least the apprentice minimum wage of £8.00 an hour.
Degrees	Build strong technical foundations through longer-form study with opportunities to specialise and progress academically.	Covers their tuition fees in full, paid directly to their university or college, not means-tested, so every eligible student can borrow the same amount regardless of household income. Repayments under Plan 5 are 9% of income above £25,000 a year, and the loan is written off after 40 years.
Bootcamps & Intensive Training	We don't currently have any Tech Industry Gold accredited bootcamp providers - accelerate their move into tech via the government's own Skills Bootcamps programme instead: free, flexible courses up to 16 weeks, built around employability.	Free to the learner. Up to 16 weeks. Available across England.
Flexible Learning (Apprenticeship Units)	Build relevant tech skills through shorter, flexible learning without committing to a full programme from the start.	Shorter, flexible training. Focused, in-demand skills. Aligned to employer needs. Can build toward larger qualifications.

Apprenticeships: Explore Apprenticeships

Degrees: Find Degrees

Bootcamps & Intensive Training: Find a Skills Bootcamp (gov.uk)

Flexible Learning (Apprenticeship Units): Explore Flexible Learning

Who pays for an apprenticeship	Employers with an annual pay bill over £3 million pay into the apprenticeship levy, topped up by government, to fund training. Smaller employers get most of the cost covered through government co-investment, and from the 2026/27 funding year, training for under-25s at these smaller, non-levy-paying employers is fully funded.
Apprentice minimum wage	£8.00 an hour: the National Minimum Wage apprentice rate, which applies if they're under 19, or 19+ and in the first year of their apprenticeship (from 1 April 2026). Once they're 19+ and past their first year, they move to the normal age-based National Minimum Wage (up to £12.71/hour for ages 21+ from April 2026), many employers pay well above the legal minimum.

Funding sources: gov.uk: Apprenticeship funding rules and assessment plan guidance, 2026 to 2027 (checked 20 July 2026); gov.uk: Student finance for undergraduates, gov.uk: Repaying your student loan; gov.uk: How interest is calculated, Plan 5 (checked 20 July 2026). Rates change each year, so confirm current figures on gov.uk before quoting them.

Apprenticeship standards in this career family

Reference	Standard	Level	Typical length
ST0322	Refrigeration Air Conditioning and Heat Pump Engineering Technician	Level 3	36 months
ST0505	IT Solutions Technician	Level 3	18 months
ST0973	Information Communications Technician	Level 3	18 months
ST0825	DevOps Engineer	Level 4	24 months

ST0322 Refrigeration Air Conditioning and Heat Pump Engineering Technician Designs, installs, maintains and services the cooling systems data centres depend on to stop hardware overheating, alongside food production, retail and healthcare cooling work.

ST0505 IT Solutions Technician Develop, implement and maintain complete IT solutions such as networks, operating systems and applications. Its own official progression routes include Software Developer, Network Engineer and DevOps Engineer.

ST0973 Information Communications Technician Official typical job titles explicitly include "Data centre support technician" alongside IT field technician and network field operative. The closest current standard to a dedicated data centre role.

ST0825 DevOps Engineer The current UK apprenticeship standard for DevOps: enabling organisations to deploy working software frequently and safely, bridging development and operations.

Pay and hiring

Level	Median pay	25th to 75th percentile	Salaries in sample	Source	Period
Junior	£35,000	£28,000 to £45,000	9	IT Jobs Watch: Junior Cloud Engineer (UK)	6 months to 11 Jul 2026
Mid-level	£70,000	£57,500 to £81,250	817	IT Jobs Watch: Cloud Engineer (UK)	6 months to 11 Jul 2026
Senior	£75,000	£65,000 to £85,000	145	IT Jobs Watch: Senior Cloud Engineer (UK)	6 months to 11 Jul 2026

A small sample makes a figure indicative only. The hiring note below says where that applies.

Hiring	Cloud engineering remains one of the fastest-growing UK tech categories as organisations continue migrating legacy systems, with demand shifting away from pure 'cloud admin' roles toward Cloud Platform Engineers, SREs (Site Reliability Engineers, engineers who apply software-engineering methods to keep systems reliable at scale) and Cloud DevOps Engineers. The junior-level figures above are based on a small sample (9 salaries), so treat that specific band as indicative rather than precise.
Remote working	Many UK employers now offer fully remote or hybrid cloud engineer roles, and the salary gap between London and the rest of the country has narrowed as remote and nearshore working models have matured, though no single precise UK-wide percentage was found for this specific role during research.
Fastest growing skill	Infrastructure as Code (Terraform, 29.81% of postings) and container orchestration (Kubernetes, 18.37%) are the clearest growth areas, reflecting the shift from manual provisioning toward automated, code-defined infrastructure.

Skills and certifications

Skills employers ask for

Skill	Importance	Demand	Time to learn	Route
Microsoft Azure	Critical	Very High, in 45% of postings	4-6 weeks	All routes
Amazon Web Services (AWS)	Critical	Very High, in 35% of postings	4-6 weeks	All routes
Terraform & Infrastructure as Code	High	High, in 30% of postings	3-4 weeks	All routes
CI/CD (Continuous Integration/Continuous Deployment) & DevOps Practices	High	High, in 24% of postings	2-3 weeks	All routes
Containers & Kubernetes	Medium	Medium, in 18% of postings	3-4 weeks	All routes
Data Centre Cabling, Cooling & Backup Power	Critical	High	On-the-job over the first year of an apprenticeship	Apprenticeship

Microsoft Azure: Azure Fundamentals learning path Microsoft Learn

Amazon Web Services (AWS): AWS Cloud Practitioner Essentials AWS Skill Builder

Terraform & Infrastructure as Code: Terraform documentation and tutorials HashiCorp Developer

CI/CD (Continuous Integration/Continuous Deployment) & DevOps Practices: GitHub Actions documentation GitHub

Containers & Kubernetes: Kubernetes basics tutorial Kubernetes.io

Containers & Kubernetes: Docker documentation Docker

Data Centre Cabling, Cooling & Backup Power: Fiber U The Fiber Optic Association (FOA)

Data Centre Cabling, Cooling & Backup Power: HVAC tutorials The Engineering Mindset

Microsoft Azure: Share of UK Cloud Engineer job postings mentioning Azure. Amazon Web Services (AWS): Share of UK Cloud Engineer job postings mentioning AWS. Terraform & Infrastructure as Code: Share of UK Cloud Engineer job postings mentioning Terraform (a further 24.93% mention Infrastructure as Code generally). CI/CD (Continuous Integration/Continuous Deployment) & DevOps Practices: Share of UK Cloud Engineer job postings mentioning DevOps (23.51%) or CI/CD (19.88%). Containers & Kubernetes: Share of UK Cloud Engineer job postings mentioning Kubernetes. Data Centre Cabling, Cooling & Backup Power: Named typical work on the SSC's live occupation pages for 'Computer system and equipment installers and servicers' and 'Electrical service and maintenance mechanics and repairers' (skillsclassification.org).

Certifications

Certification	Provider	Cost	Time	Level	Recognised	Best stage
Microsoft Certified: Azure Fundamentals (AZ-900)	Microsoft	£77 (exam fee, correct at time of writing, check learn.microsoft.com for current pricing)	2-4 weeks part-time	Beginner	High	Before you apply
AWS Certified Cloud Practitioner	Amazon Web Services	$100 / approx. £80 (exam fee, correct at time of writing, check aws.amazon.com/certification for current pricing)	2-4 weeks part-time	Beginner	High	Before you apply

For careers coaches and advisers

Area of work	Who it suits	Example roles	Apprenticeship standards
Cloud Engineering	Analytical minds who enjoy building complex, logical systems in the cloud.	Cloud Engineer, Cloud Architect, Platform Engineer, FinOps Analyst	None listed in the Matrix yet
DevOps & Automation	Automation enthusiasts who hate doing the same manual task twice.	DevOps Engineer, SRE (Reliability), Automation Lead, Build Engineer	ST0825 Level 4
Systems & Virtualisation	Methodical thinkers who enjoy the 'engine room' of IT.	Systems Administrator, Virtualisation Lead, Storage Engineer, Database Administrator	ST0505 Level 3
Data Centre Ops	Practical people who enjoy working with physical technology and hardware.	Data Centre Technician, Hardware Engineer, DC Ops Manager, Fibre Technician	ST0973 Level 3, ST0322 Level 3
Solutions Architecture	Big-picture thinkers who can bridge the gap between CEO and Engineer.	Solutions Architect, Enterprise Architect, Infrastructure Strategist	None listed in the Matrix yet
Emerging Tech	Early adopters who want to build the foundations of tomorrow.	Edge Architect, Sustainable Tech Lead, Quantum Infra Lead	None listed in the Matrix yet
Site Reliability & Observability	Calm operators who thrive when things go wrong and need fixing fast.	Site Reliability Engineer, Observability Engineer, Incident Manager, Performance Engineer	None listed in the Matrix yet
Cloud Security & Compliance	Detail-oriented engineers who enjoy translating regulation into technical controls.	Cloud Security Engineer, Compliance Analyst, FinOps & GRC Lead, Cloud Governance Manager	None listed in the Matrix yet

The Who it suits column comes from the Career Matrix. It is a starting point for a conversation, not an assessment.

Notes on your client

Where to send someone next

National Careers Service Careers advice, job profiles, information and resources. (Department for Education. Checked 1 November 2026.)

Find an apprenticeship Register a profile, search vacancies and apply for an apprenticeship. Applicants must be 16 or over. (GOV.UK. Checked 1 November 2026.)

Skills Bootcamps For people updating their skills to progress in their current job or move into a different role. (JobHelp, GOV.UK. Checked 1 November 2026.)

Jobcentre Plus: contact and nearest office Contact details for claims, appointments and help finding a job, and a way to find the nearest Jobcentre Plus. (Department for Work and Pensions. Checked 1 November 2026.)

Skills England: apprenticeship search Skills England's apprenticeship search. (Skills England. Checked 1 November 2026.)

General notes

Sources and checking

The figures in this guide were checked on dates from 11 July 2026 to 1 November 2026. Each source below shows its own date.

Skills England: ST0322 Refrigeration Air Conditioning and Heat Pump Engineering Technician Checked 30 July 2026

Skills England: ST0505 IT Solutions Technician Checked 10 August 2026

Skills England: ST0973 Information Communications Technician Checked 30 July 2026

Skills England: ST0825 DevOps Engineer Checked 10 August 2026

National Careers Service, Department for Education Checked 1 November 2026

Find an apprenticeship, GOV.UK Checked 1 November 2026

Skills Bootcamps, JobHelp, GOV.UK Checked 1 November 2026

Jobcentre Plus: contact and nearest office, Department for Work and Pensions Checked 1 November 2026

Skills England: apprenticeship search, Skills England Checked 1 November 2026

- gov.uk: Apprenticeship funding rules and assessment plan guidance, 2026 to 2027 (checked 20 July 2026)
- gov.uk: National Minimum Wage and National Living Wage rates (checked 20 July 2026)
- gov.uk: Student finance for undergraduates (checked 20 July 2026)
- gov.uk: Repaying your student loan; gov.uk: How interest is calculated, Plan 5 (checked 20 July 2026)
- ONS ASHE Table 14, 2024 (revised) (checked 11 July 2026)
- IT Jobs Watch: Cloud Engineer / Junior Cloud Engineer / Senior Cloud Engineer (UK) (checked 11 July 2026)
- Cloud Computing Jobs UK: Cloud Computing Hiring Trends 2026 (checked 11 July 2026)
- IT Jobs Watch: Cloud Engineer skills (UK), 6 months to 11 Jul 2026 (checked 11 July 2026)
- UK Standard Skills Classification (skillsclassification.org): Computer system and equipment installers and servicers; Electrical service and maintenance mechanics and repairers (checked 29 July 2026)
- IfATE/Skills England: Information Communications Technician (ST0973) (checked 29 July 2026)
- The Fiber Optic Association (FOA): Fiber U (checked 29 July 2026)
- The Engineering Mindset: HVAC tutorials (checked 29 July 2026)
- Microsoft Learn certification catalogue (checked 11 July 2026)
- IT Jobs Watch: Cloud Engineer skills (UK), 6 months to 11 Jul 2026 (45.34% mention Azure) (checked 11 July 2026)
- AWS certification documentation (checked 11 July 2026)
- IT Jobs Watch: Cloud Engineer skills (UK), 6 months to 11 Jul 2026 (35.23% mention AWS) (checked 11 July 2026)