techskills

TEACHERS AND LECTURERS

Data & AI careers: a guide for teachers and lecturers

Insights & Intelligence Engines

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

About this guide

This guide is for teachers and lecturers who advise students on careers in Data & AI.

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.

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Produced by	TechSkills, techskills.org

Data & AI at a glance

No.	Area of work	What it covers	Example roles	Pay range
01	Data Foundations & Engineering	Before insights or AI can exist, data must be collected, cleaned, structured, and made accessible.	Data Engineer, Analytics Engineer, Database Specialist, Data Platform Engineer	£33,515 to £90,000+
02	Analytics & Decision Intelligence	Extracting meaning from data to guide strategy, operations, and performance.	Data Analyst, Business Intelligence Developer, Decision Scientist, Analytics Lead	£30,000 to £82,250+
03	Machine Learning & AI Development	Designing algorithms and models that automate prediction, classification, and optimisation.	Machine Learning Engineer, AI Engineer, Applied Scientist, NLP / Computer Vision Specialist	£44,875 to £117,000+
04	Data Strategy, Governance & Ethics	Managing risk, compliance, privacy, and ethical considerations.	Data Governance Lead, Privacy Engineer, Responsible AI Specialist, Chief Data Officer	£40,000 to £150,000+
05	AI Operations & Deployment	Ensuring AI systems remain reliable, secure, and effective after deployment.	MLOps Engineer, AI Platform Engineer, Model Operations Specialist, AI Reliability Engineer	£57,500 to £123,750+
06	Frontier AI & Advanced Applications	Pushing the boundaries of what AI can achieve.	Generative AI Specialist, Robotics AI Engineer, Autonomous Systems Developer, AI Research Engineer	£55,000 to £105,000+
07	Applied Data Science & Experimentation	Using statistics and experimentation, A/B tests, causal inference, forecasting, to answer specific business questions with evidence.	Data Scientist, Experimentation Lead, Forecasting Analyst, Research Scientist	£36,000 to £95,000+
08	Data & AI Product Management	Defining the roadmap for data platforms and AI features, balancing what's technically possible with what genuinely helps users.	AI Product Manager, Data Product Manager, ML Product Owner, Platform Product Manager	£47,624 to £102,735+
09	Asset Integrity & Inspection Engineering	Uses ultrasonic, radiographic and thermographic imaging to inspect materials, welds and components for hidden flaws, generating and interpreting the data that proves whether safety-critical infrastructure and equipment can keep running.	NDT Engineer, Materials Engineer, Asset Integrity Engineer, Quality Assurance Engineer	£24,000 to £70,000+

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 Data Foundations & Engineering

What it is	Before insights or AI can exist, data must be collected, cleaned, structured, and made accessible.
Example roles	Data Engineer, Analytics Engineer, Database Specialist, Data Platform Engineer
Skills used	Data pipelines; ETL/ELT; Cloud data platforms; Data modelling; Reliability engineering
Who it suits	Engineers who enjoy solving complex systems and infrastructure challenges.
Example of the work	Enables organisations to trust, access, and scale their data assets.
What shows someone can do it	Ability to deliver production-grade data systems that support analytics and AI at scale.
Sectors that hire	Financial Services, Retail & E-commerce, Healthcare & Life Sciences, Telecommunications, Government & Public Sector
Pay	£33,515 to £90,000+. Source: database administrator, ONS ASHE, to lead data engineer, IT Jobs Watch UK.

Apprenticeship route: Construction Technology & Geospatial Surveying

What it is	Before any dataset, 3D model or map exists, someone has to capture the real world accurately: laser-scanning a construction site, surveying land with GPS equipment, or flying a mapping drone. This is data engineering's on-site, hands-on entry point.
Example roles	Surveying Technician, Engineering Design Technician (BIM/CAD), Geospatial Survey Technician
What suits this route	Comfortable working outdoors on construction sites or in the field; Precise, methodical approach to measurement and data capture; Interested in how the physical and digital worlds connect, not just abstract data
Pay	£32,905 to £47,519. Source: median, surveying technician to chartered surveyor.

Standard	Reference	Level	Typical length	Checked
Surveying Technician	ST0332	Level 3	24 months	29 July 2026
Engineering Design Technician	ST0164	Level 3	42 months	30 July 2026
Geospatial Survey Technician	ST0491	Level 3	24 months	29 July 2026

02 Analytics & Decision Intelligence

What it is	Extracting meaning from data to guide strategy, operations, and performance.

Example roles	Data Analyst, Business Intelligence Developer, Decision Scientist, Analytics Lead
Skills used	Data visualisation; Statistical analysis; Dashboard development; Business translation
Who it suits	Logicians who enjoy structure, organisation, and clear visual communication.
Example of the work	Supports evidence-based decision-making across organisations.
What shows someone can do it	Ability to communicate insights clearly to non-technical stakeholders.
Sectors that hire	Financial Services, Retail & E-commerce, Healthcare & Life Sciences, Professional & Consulting Services, Insurance
Pay	£30,000 to £82,250+. Source: data analyst 10th percentile to senior data analyst 90th percentile, IT Jobs Watch UK.

Apprenticeship route: Data Analyst, Apprenticeship Route

What it is	Work with a real employer's own data from day one, progressing from collecting and formatting data through to producing the insight and reports the business actually uses to make decisions.
Example roles	Data Technician, Junior Data Analyst, Data Analyst Apprentice
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	£20,500 to £41,000+. Source: Data Technician apprentice to fully qualified Data Analyst, Glassdoor/Payscale UK.

Standard	Reference	Level	Typical length	Checked
Data Technician	ST0795	Level 3	24 months	10 August 2026
Data Analyst	ST0118	Level 4	24 months	10 August 2026

03 Machine Learning & AI Development

What it is	Designing algorithms and models that automate prediction, classification, and optimisation.
Example roles	Machine Learning Engineer, AI Engineer, Applied Scientist, NLP / Computer Vision Specialist
Skills used	Model development; Training pipelines; Evaluation; Deployment; Responsible AI practices
Who it suits	Mathematical thinkers who love experimentation, research, and coding.
Example of the work	Powers automation, personalisation, and intelligent services.

What shows someone can do it	Ability to move models from experimentation into real world production environments.
Sectors that hire	Technology & Software, Financial Services, Healthcare & Life Sciences, Retail & E-commerce, Automotive
Pay	£44,875 to £117,000+. Source: NLP specialist 10th percentile to AI engineer 90th percentile, IT Jobs Watch UK.

Apprenticeship route: Machine Learning Engineer, Apprenticeship Route

What it is	Gather data, build, deploy and validate real machine learning and AI solutions for a real employer, earning a wage throughout rather than self-funding a postgraduate degree.
Example roles	Machine Learning Engineer Apprentice, ML Operations Engineer, AI Data Specialist
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 A levels or a relevant Level 4/5 qualification rather than a completed degree
Pay	£28,000 to £65,000+. Source: ML Engineer apprentice to newly-qualified ML Engineer, Glassdoor/Payscale UK.

Standard	Reference	Level	Typical length	Checked
Machine Learning Engineer	ST1398	Level 6	24 months	10 August 2026

04 Data Strategy, Governance & Ethics

What it is	Managing risk, compliance, privacy, and ethical considerations.
Example roles	Data Governance Lead, Privacy Engineer, Responsible AI Specialist, Chief Data Officer
Skills used	Data protection; Regulatory compliance; Ethical frameworks; Risk management
Who it suits	Detail-oriented thinkers interested in law, ethics, and social impact.
Example of the work	Builds trust, compliance, and long term sustainability.
What shows someone can do it	Balancing innovation with accountability and public trust.
Sectors that hire	Financial Services, Healthcare & Life Sciences, Government & Public Sector, Legal Services, Insurance
Pay	£40,000 to £150,000+. Source: data protection officer, IT Jobs Watch UK, to chief data officer, Payscale UK.

05 AI Operations & Deployment

What it is	Ensuring AI systems remain reliable, secure, and effective after deployment.
Example roles	MLOps Engineer, AI Platform Engineer, Model Operations Specialist, AI Reliability Engineer
Skills used	Model monitoring; Automation; Infrastructure; Lifecycle management; Performance tuning
Who it suits	System builders who enjoy the bridge between software engineering and AI.
Example of the work	Transforms prototypes into dependable production systems.
What shows someone can do it	Operational ownership of AI systems in real world conditions.
Sectors that hire	Technology & Software, Financial Services, Retail & E-commerce, Telecommunications, Healthcare & Life Sciences
Pay	£57,500 to £123,750+. Source: MLOps engineer, junior to senior, IT Jobs Watch UK, closest real data for AI platform/model ops/reliability roles.

06 Frontier AI & Advanced Applications

What it is	Pushing the boundaries of what AI can achieve.
Example roles	Generative AI Specialist, Robotics AI Engineer, Autonomous Systems Developer, AI Research Engineer
Skills used	Large language models; Reinforcement learning; Human-AI interaction; Advanced simulation
Who it suits	Early adopters who thrive in rapidly changing, experimental environments.
Example of the work	Positions the UK at the forefront of global innovation.
What shows someone can do it	Ability to translate research into practical applications.
Sectors that hire	Technology & Software, Automotive, Healthcare & Life Sciences, Media & Entertainment, Aerospace & Defence
Pay	£55,000 to £105,000+. Source: robotics engineer to generative AI software engineer, IT Jobs Watch UK.

07 Applied Data Science & Experimentation

What it is	Using statistics and experimentation, A/B tests, causal inference, forecasting, to answer specific business questions with evidence.
Example roles	Data Scientist, Experimentation Lead, Forecasting Analyst, Research Scientist
Skills used	Experimental design; Causal inference; Statistical modelling; Forecasting; Hypothesis testing

Who it suits	Curious investigators who want proof, not just intuition.
Example of the work	Turns uncertainty into confident, evidence-backed decisions.
What shows someone can do it	Scientific rigour combined with the ability to communicate uncertainty clearly.
Sectors that hire	Financial Services, Retail & E-commerce, Healthcare & Life Sciences, Insurance, Technology & Software
Pay	£36,000 to £95,000+. Source: junior data scientist to senior data scientist, IT Jobs Watch UK.

08 Data & AI Product Management

What it is	Defining the roadmap for data platforms and AI features, balancing what's technically possible with what genuinely helps users.
Example roles	AI Product Manager, Data Product Manager, ML Product Owner, Platform Product Manager
Skills used	Product strategy; Stakeholder management; Data literacy; Roadmapping; User research
Who it suits	Bridge-builders who enjoy scoping ambiguous problems into shippable plans.
Example of the work	Ensures data and AI investment translates into features that create real value.
What shows someone can do it	Ability to translate between data scientists, engineers, and business stakeholders.
Sectors that hire	Technology & Software, Financial Services, Retail & E-commerce, Healthcare & Life Sciences, Media & Entertainment
Pay	£47,624 to £102,735+. Source: AI product manager, 25th to 90th percentile, Glassdoor UK.

09 Asset Integrity & Inspection Engineering

What it is	Uses ultrasonic, radiographic and thermographic imaging to inspect materials, welds and components for hidden flaws, generating and interpreting the data that proves whether safety-critical infrastructure and equipment can keep running.
Example roles	NDT Engineer, Materials Engineer, Asset Integrity Engineer, Quality Assurance Engineer
Skills used	Ultrasonic, radiographic and thermographic inspection; Fault and defect analysis; Inspection reporting and certification; Safety-critical asset assessment; Quality assurance and re-inspection audit
Who it suits	Methodical, detail-focused people who'd rather prove something is safe with real evidence than take someone's word for it.
Example of the work	Prevents catastrophic failure of safety-critical infrastructure and equipment across nuclear, aerospace, rail, oil & gas, marine and construction.

What shows someone can do it	Ability to find and correctly report a hidden structural flaw before it causes a safety-critical failure.
Sectors that hire	Manufacturing & Engineering, Aerospace & Defence, Energy & Utilities, Construction & Civil Engineering, Marine & Maritime
Pay	£24,000 to £70,000+. Source: technician to senior NDT/asset integrity engineer, Glassdoor/Indeed UK benchmarks.

Apprenticeship route: Non-Destructive Testing (NDT)

What it is	Inspect materials, welds and components on site or in a test facility using ultrasonic, radiographic and other non-destructive methods, working towards industry-recognised NDT certification rather than starting with a standalone degree.
Example roles	NDT Operator Apprentice, NDT Engineering Technician, Inspection Engineer
What suits this route	Comfortable working on site, in a workshop, or around industrial test equipment; Patient, methodical approach to detailed inspection work; Interested in materials and structures, not just the finished design
Pay	£22,000 to £45,000+. Source: Level 2 operator apprentice to Level 3 engineering technician, Glassdoor/Indeed UK benchmarks.

Standard	Reference	Level	Typical length	Checked
Non-destructive Testing (NDT) Operator	ST0358	Level 2	18 months	31 July 2026
Non-destructive Testing Engineering Technician	ST0288	Level 3	36 months	31 July 2026
Non-destructive Testing Engineer (integrated degree)	ST0369	Level 6	48 months	31 July 2026

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
ST0358	Non-destructive Testing (NDT) Operator	Level 2	18 months
ST0164	Engineering Design Technician	Level 3	42 months
ST0288	Non-destructive Testing Engineering Technician	Level 3	36 months
ST0332	Surveying Technician	Level 3	24 months
ST0491	Geospatial Survey Technician	Level 3	24 months
ST0795	Data Technician	Level 3	24 months
ST0118	Data Analyst	Level 4	24 months
ST0369	Non-destructive Testing Engineer (integrated degree)	Level 6	48 months
ST1398	Machine Learning Engineer	Level 6	24 months

ST0358 Non-destructive Testing (NDT) Operator Inspects materials, welds and components using non-destructive testing methods (e.g. ultrasonic, radiographic) under supervision. Requires industry-recognised NDT Level 2 certification in one method.

ST0164 Engineering Design Technician Its own typical job titles explicitly list "Building information modelling (BIM) technician" and "CAD technician", the genuine standard behind both roles, sitting in the engineering rather than construction route.

ST0288 Non-destructive Testing Engineering Technician Supervises NDT Operators and validates their work through re-inspection audits across aerospace, motorsport, power generation, rail, oil & gas, marine and construction. Live version 1.1 (v1.0 retired March 2025).

ST0332 Surveying Technician Covers 7 pathways including Building, Land, and Quantity Surveying Technician. Leads to a Level 3 Diploma in Surveying and RICS Associate membership. Its own typical job titles explicitly include "Land Surveying Technician".

ST0491 Geospatial Survey Technician Collects geospatial data for maps, GNSS/GPS and infrastructure using GIS. Explicitly lists utilities companies among typical employers, and is the closest current standard for GIS Technician and Utility Survey Technician roles.

ST0795 Data Technician The entry-level route into data work: source, format and present data securely for analysis, and communicate outcomes to the relevant audience.

ST0118 Data Analyst The core UK apprenticeship standard for data analysis: collect, organise and study data to provide business insight and support evidence-based decision-making.

ST0369 Non-destructive Testing Engineer (integrated degree) Oversees NDT operations and staff, inspecting safety-critical components for faults such as corrosion and cracking. Typical job titles include Specialist Inspector, NDT Expert and Quality Engineer.

ST1398 Machine Learning Engineer The current UK apprenticeship standard for ML engineering: gather data from different sources to design, build, deploy and validate machine learning and/or AI solutions. Progresses toward AI Data Specialist roles.

Pay and hiring

Level	Median pay	25th to 75th percentile	Salaries in sample	Source	Period
Junior	£32,500	£30,000 to £37,000	11	IT Jobs Watch: Junior Data Analyst (UK)	6 months to 11 Jul 2026
Mid-level	£45,000	£35,000 to £60,000	Not given	IT Jobs Watch: Data Analyst (UK)	6 months to 11 Jul 2026
Senior	£60,000	£50,000 to £76,250	62	IT Jobs Watch: Senior Data Analyst (UK)	6 months to 11 Jul 2026

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

Hiring	Demand for data analysts continues to grow, with UK data-role postings up 7.7% year-on-year, organisations across finance, retail, healthcare and government are all hiring. The junior-level figures above are based on a small sample (11 salaries), so treat that specific band as indicative rather than precise.
Remote working	49.5% of UK data-role job postings were listed as hybrid or flexible; fully remote positions commanded the highest average salary of the three arrangements (Jan-Apr 2026 data).
Fastest growing skill	AI-related keywords now appear in over half of UK Data Analyst postings (53.80%), alongside continued strong demand for Power BI and cloud platforms like Azure, a shift from purely descriptive reporting toward AI-assisted analytics.

Skills and certifications

Skills employers ask for

Skill	Importance	Demand	Time to learn	Route
SQL (Structured Query Language)	Critical	Very High, in 70% of postings	2-3 weeks	All routes
Power BI	Critical	Very High, in 63% of postings	3-4 weeks	All routes
Python	High	High, in 63% of postings	4-6 weeks	All routes
Microsoft Excel	High	High, in 61% of postings	1-2 weeks	All routes
Tableau	Medium	High, in 57% of postings	2-3 weeks	All routes
Business Intelligence & Data Storytelling	High	Very High, in 64% of postings	Ongoing, alongside tool-specific learning	All routes
Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping)	Critical	High	On-the-job over the first 12 months of an apprenticeship	Apprenticeship
Non-Destructive Testing (NDT) Methods (Ultrasonic, Radiographic, Visual)	Critical	High	Method-specific PCN Level 1/2 certification, typically several weeks of training plus supervised practice	Apprenticeship
Inspection Reporting & Certification	High	Medium	Built up alongside hands-on inspection practice over the apprenticeship	Apprenticeship

SQL (Structured Query Language): SQL Khan Academy

SQL (Structured Query Language): PostgreSQL documentation PostgreSQL

Power BI: Power BI learning path Microsoft Learn

Python: Python documentation Python.org

Python: Data Analysis with Python freeCodeCamp

Microsoft Excel: Excel for data analysis Microsoft Learn

Tableau: Tableau free training videos Tableau

Business Intelligence & Data Storytelling: Foundations: Data, Data, Everywhere Coursera (Google, free-audit)

Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping): Working with GPS Data (QGIS User Guide) QGIS.org

Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping): Using QGIS as a survey tool Emlid

Non-Destructive Testing (NDT) Methods (Ultrasonic, Radiographic, Visual): Education & Training BINDT (British Institute of Non-Destructive Testing)

SQL (Structured Query Language): Share of UK Data Analyst job postings mentioning SQL. Power BI: Share of UK Data Analyst job postings mentioning Power BI. Python: Share of UK Data Analyst job postings mentioning Python. Microsoft Excel: Share of UK Data Analyst job postings mentioning Microsoft Excel. Tableau: Share of UK Data Analyst job postings mentioning Tableau. Business Intelligence & Data Storytelling: Share of UK Data Analyst job postings mentioning Business Intelligence broadly (tool-agnostic). Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping): Named typical work on the SSC's live occupation page for 'Surveying

technicians' (skillsclassification.org), and the occupational profile of the Surveying Technician (ST0332) and Geospatial Survey Technician (ST0491) apprenticeship standards. Non-Destructive Testing (NDT) Methods (Ultrasonic, Radiographic, Visual): Core occupational purpose of the NDT Operator (ST0358) and NDT Engineering Technician (ST0288) standards; BINDT (the British Institute of Non-Destructive Testing)'s Personnel Certification in NDT (PCN) scheme is the recognised industry qualification route for each method. Inspection Reporting & Certification: Named as a core Engineering Technician (ST0288) responsibility alongside hands-on inspection work.

Certifications

Certification	Provider	Cost	Time	Level	Recognised	Best stage
Microsoft Certified: Azure Data Fundamentals (DP-900)	Microsoft	$99 / approx. £80 (exam fee, correct at time of writing, check learn.microsoft.com for current pricing)	2-4 weeks part-time (15-25 hours for someone new to data)	Beginner	Medium	Before you apply
Google Data Analytics Professional Certificate	Google (via Coursera)	Coursera subscription, approx. £35-45/month, typically completed in 3-6 months	3-6 months part-time	Beginner	Medium	Before you apply

For teachers and lecturers

Area of work	Who it suits	Example roles	Apprenticeship standards
Data Foundations & Engineering	Engineers who enjoy solving complex systems and infrastructure challenges.	Data Engineer, Analytics Engineer, Database Specialist, Data Platform Engineer	ST0332 Level 3, ST0164 Level 3, ST0491 Level 3
Analytics & Decision Intelligence	Logicians who enjoy structure, organisation, and clear visual communication.	Data Analyst, Business Intelligence Developer, Decision Scientist, Analytics Lead	ST0795 Level 3, ST0118 Level 4
Machine Learning & AI Development	Mathematical thinkers who love experimentation, research, and coding.	Machine Learning Engineer, AI Engineer, Applied Scientist, NLP / Computer Vision Specialist	ST1398 Level 6
Data Strategy, Governance & Ethics	Detail-oriented thinkers interested in law, ethics, and social impact.	Data Governance Lead, Privacy Engineer, Responsible AI Specialist, Chief Data Officer	None listed in the Matrix yet
AI Operations & Deployment	System builders who enjoy the bridge between software engineering and AI.	MLOps Engineer, AI Platform Engineer, Model Operations Specialist, AI Reliability Engineer	None listed in the Matrix yet
Frontier AI & Advanced Applications	Early adopters who thrive in rapidly changing, experimental environments.	Generative AI Specialist, Robotics AI Engineer, Autonomous Systems Developer, AI Research Engineer	None listed in the Matrix yet
Applied Data Science & Experimentation	Curious investigators who want proof, not just intuition.	Data Scientist, Experimentation Lead, Forecasting Analyst, Research Scientist	None listed in the Matrix yet
Data & AI Product Management	Bridge-builders who enjoy scoping ambiguous problems into shippable plans.	AI Product Manager, Data Product Manager, ML Product Owner, Platform Product Manager	None listed in the Matrix yet
Asset Integrity & Inspection Engineering	Methodical, detail-focused people who'd rather prove something is safe with real evidence than take someone's word for it.	NDT Engineer, Materials Engineer, Asset Integrity Engineer, Quality Assurance Engineer	ST0358 Level 2, ST0288 Level 3, ST0369 Level 6

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

Notes on your students

Activities for lessons and clubs

Activity	What students do	Level	Time	Skills shown
Sales Dashboard	A Power BI or Tableau dashboard built from a public retail/sales dataset (e.g. a Kaggle superstore dataset), showing revenue trends, top products and regional performance with interactive filters.	Beginner	8-12 hours	Power BI, Microsoft Excel
Customer Churn Analysis	Using a public telecom or subscription churn dataset (e.g. the well-known Kaggle Telco Customer Churn dataset), identify which customer attributes correlate most with churn using Python/pandas, and present findings with clear visualisations.	Intermediate	12-18 hours	Python, SQL, Business Intelligence & Data Storytelling
NHS Data Explorer	An exploratory analysis of a real, genuinely public NHS dataset (e.g. NHS England's Data Catalogue at data.england.nhs.uk, the NHSBSA, NHS Business Services Authority, Open Data Portal, or NHS Digital's published statistics), for example, prescribing trends or A&E waiting times by region.	Intermediate	12-16 hours	SQL, Python, Business Intelligence & Data Storytelling
Power BI Executive Dashboard	A polished, presentation-ready Power BI dashboard summarising a full dataset for a non-technical executive audience, fewer, higher-level visuals than the Sales Dashboard project, with a clear narrative flow and KPIs (Key Performance Indicators, the specific numbers a business tracks to judge success) calculated using DAX (Data Analysis Expressions, Power BI's built-in formula language).	Advanced	15-20 hours	Power BI, Business Intelligence & Data Storytelling

Activity	What students do	Level	Time	Skills shown
Multi-Method Site Survey Comparison	Survey a real or training yard site using a total station and an RTK GNSS (Real-Time Kinematic Global Navigation Satellite System, a highly precise, centimetre-accurate form of satellite positioning) or GPS rover, capturing the same control points with each method, then bring both datasets into GIS (Geographic Information System, software for mapping and analysing location-based data) or CAD (Computer-Aided Design) software to compare accuracy and produce a single coordinated survey plan.	Beginner	6-10 hours	Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping)
Drone to BIM (Building Information Modelling) Discrepancy Check	Fly an authorised UAV (Unmanned Aerial Vehicle, i.e. drone) mapping mission over a site or existing structure, process the imagery into an orthomosaic (a single, accurately-scaled aerial image stitched together from many overlapping photos) or point cloud (a 3D map made of millions of individually measured points), then overlay it against the BIM design model or GIS (Geographic Information System) site drawing to flag any as built versus design discrepancies.	Advanced	10-15 hours	Capture Accurate Site Survey Data (GPS, Laser Scanning, Drone Mapping)
Component Inspection Report (NDT)	Under supervision, inspect a test component using an available non-destructive testing method (e.g. visual or ultrasonic), then produce a formal written inspection report stating the method used, findings, and a clear pass/fail decision against a stated acceptance standard, reviewed by your mentor or trainer.	Intermediate	6-10 hours	Non-Destructive Testing (NDT) Methods (Ultrasonic, Radiographic, Visual), Inspection Reporting & Certification

These are the portfolio projects used in the TechSkills Career Planner. Each is meant to produce work a learner can show an employer.

Where to find out more

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.)

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: ST0358 Non-destructive Testing (NDT) Operator Checked 31 July 2026

Skills England: ST0164 Engineering Design Technician Checked 30 July 2026

Skills England: ST0288 Non-destructive Testing Engineering Technician Checked 31 July 2026

Skills England: ST0332 Surveying Technician Checked 29 July 2026

Skills England: ST0491 Geospatial Survey Technician Checked 29 July 2026

Skills England: ST0795 Data Technician Checked 10 August 2026

Skills England: ST0118 Data Analyst Checked 10 August 2026

Skills England: ST0369 Non-destructive Testing Engineer (integrated degree) Checked 31 July 2026

Skills England: ST1398 Machine Learning 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

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: Data Analyst / Junior Data Analyst / Senior Data Analyst (UK) (checked 11 July 2026)
- Data Job Market Report (UK), Learning People / Adzuna, Jun 2026 (checked 11 July 2026)
- IT Jobs Watch: Data Analyst skills (UK), 6 months to 11 Jul 2026 (checked 11 July 2026)
- Luxley: Data Analyst Certifications UK 2026 (checked 11 July 2026)
- UK Standard Skills Classification (skillsclassification.org): Surveying technicians (checked 29 July 2026)
- IfATE/Skills England: Surveying Technician (ST0332), Geospatial Survey Technician (ST0491) (checked 29 July 2026)
- QGIS.org user guide (checked 29 July 2026)
- Emlid documentation (checked 29 July 2026)
- IfATE/Skills England: Non-destructive Testing (NDT) Operator (ST0358), Non-destructive Testing Engineering Technician (ST0288) (checked 31 July 2026)
- BINDT: Education & Training / PCN certification scheme (checked 31 July 2026)
- IfATE/Skills England: Non-destructive Testing Engineering Technician (ST0288) (checked 31 July 2026)
- Microsoft Learn certification documentation (checked 11 July 2026)
- CBT Nuggets: 'Is the DP-900 Worth It?' (checked 11 July 2026)
- Careery: Google Data Analytics Certificate Review 2026 (checked 11 July 2026)