Skills England

Artificial intelligence (AI) and automation practitioner

Key information

Reference: ST1512
Version: 2.0
Level: 4
Typical duration to gateway: 18 months
Minimum hours for compliance : 420
Route: Digital
Integration: None
Maximum funding: £18000
Date updated: 14/01/2026
Approved for delivery: 10 December 2025

Lars code: 828
Class code: Z0001946
EQA provider: Ofqual
Example progression routes:
Data engineer,
Data scientist (integrated degree),
Artificial intelligence (AI) data specialist
Review: this apprenticeship will be reviewed in accordance with our change request policy.

Occupational standard | Assessment

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Details of the occupational standard

Occupation summary

This occupation is found in a wide range of sectors and organisations that rely on digital tools, online systems, and data-driven processes to operate efficiently. Employees in this occupation support improvement wherever digital workflows exist and are typically embedded in operational teams, working in digital support roles, or in change delivery functions. They may also be employed by consultancies or service providers helping organisations optimise internal and customer-facing processes.

The broad purpose of the occupation is to enhance productivity, streamline processes, and support continuous improvement through the safe and responsible use of automation, integration, and AI tools. They understand, select, and implement digital solutions to address inefficiencies in existing systems. Their work is focused on solving real-world challenges that slow down business operations such as manual tasks, duplicated data entry, unintegrated tools, and inefficient workflows. They play a key role in unlocking time and cost savings supporting organisations to realise the potential for AI, automation and digital solutions to improve efficiency, accuracy or productivity.

In their daily work, an employee in this occupation interacts with internal stakeholders across a variety of teams such as operations, service delivery, customer support, or finance, depending on the organisation. They may also engage with external suppliers or digital tool providers to implement new systems or assist with integrations. They report to team leaders, service managers or project owners and work closely with colleagues to analyse and support existing ways of working. They use communication, collaboration, and feedback skills to align their automation work with wider organisational goals.

An employee in this occupation will be responsible for identifying opportunities to improve workflow efficiency and productivity using digital tools. They will analyse current systems and processes, make recommendations utilising low-or no-code solutions including AI-driven automations. They will support with user adoption, facilitating the responsible, safe and ethical use of AI, automation and digital solutions, ensuring they align with organisational policies and user needs.

While they are not expected to lead teams, they are responsible for taking ownership of specific projects or tasks that deliver tangible operational value.

Typical job titles include:

- Ai integration officer
- Automation enablement consultant
- Business process support executive
- Digital automation specialist
- Digital operations technician
- Digital productivity consultant
- Junior innovation consultant
- Process automation analyst
- Technology operations coordinator
- Workflow solutions assistant

Occupation duties

DUTY	KSBS
Duty 1 Identify opportunities for automation to drive operational improvement and cost savings. Advocate for responsible implementation, balancing the pursuit of efficiency with fairness, transparency, and a commitment to supporting workforce wellbeing.	K1 K2 K4 K5 K19 K23 K24 K25 K26 K29 S2 S3 S4 S6 S11 S12 S21 S24 S25 S27 B2 B5 B6
Duty 2 Provide input into the implementation of AI and automation solutions that extend beyond low-or no-code platforms. Collaborate when needed with technical teams such as architects and leads to enable the successful delivery of automation opportunities.	K3 K5 K9 K14 K22 K29 S1 S3 S6 S11 S12 S13 S14 S15 B1 B2 B6
Duty 3 Evaluate available AI, automation tools and platforms.	K5 K9 K15 K24 K25 K29 S6 S9 S10 S13 S14 S21 S24 S25 S27 B1 B4 B6
Duty 4 Facilitate and support with the design and delivery of workshops and solution design sessions.	K16 K20 K21 K22 K25 S2 S4 S18 S20 S25 B1 B3 B4 B6
Duty 5 Simplify processes and design workflows that exploit AI and automation.	K1 K18 K22 K23 K27 K28 K29 S11 S12 S26 S27 S28 B3
Duty 6 Configure and adapt low-or no-code tools to solve problems and drive efficiencies.	K5 K9 K10 K11 S7 S8 S9 S14

Duty 7 Apply AI automation solutions to add value. For example, chatbots, summarisation, and automation platforms such as cloud SaaS and PaaS services.	K5 K6 K29 S11 S12 S13 S14 B6
Duty 8 Develop, document and test integrated digital workflows. Produce documents to meet audience requirements such as technical and end-user materials.	K2 K3 K12 K13 K14 K15 K19 K25 K27 S8 S9 S11 S12 S18 S26 S28
Duty 9 Keep colleagues, stakeholders and line managers informed on progress.	K22 K23 K24 S15 S21 S22 S24 S29 B1 B6
Duty 10 Provide training and or user guides for adopted tools, adapting content and format to audience needs.	K11 K16 K22 K23 S11 S12 S19 S23 B3
Duty 11 Support teams with change management and adoption activities.	K3 K11 K13 K14 K16 K22 K23 K24 K28 S2 S4 S5 S10 S19 S20 S22 S23 S24 S26 S29 B3 B4 B6
Duty 12 Monitor and refine automations incorporating feedback from end- users to improve.	K3 K7 K12 K15 S9 S11 S12 B2 B6

Duty 13 Measure and report on productivity, efficiency and value improvement savings.	K7 K16 K17 K18 K23 S2 S4 S10 S13 S14 S15 S16 S17 B1 B5
Duty 14 Ensure personal compliance and support stakeholders with digital ethics, security, and privacy including governance, auditing, explainability, and documentation of decision-making.	K8 K12 K18 K19 K28 K29 S8 S12 S15 S22 S29 B2 B5
Duty 15 Keep up to date with AI automation trends, opportunities, and risks to inform current and future practice.	

KSBs

Knowledge

K1: The role of organisational leadership in responsible AI adoption, including setting values, policy, and strategy. The business case for ethical AI adoption, including reputational risk, staff morale, and long-term sustainability.

K2: Legal and regulatory frameworks including employment rights, equality, and responsible automation, data protection and GDPR. Ethical principles and professional standards relevant to AI development such as fairness, transparency, and accountability.

K3: Understand the potential social and economic impacts of AI and automation on different roles, particularly for non-technical staff including change management principles.

K4: Approaches for identifying and implementing incremental change, including piloting, evaluating solutions in relation to organisational constraints such as budget, time, and resources.

K5: Methods to identify opportunities to enhance productivity such as improve processes, reduce waste, increase user or customer satisfaction or optimise outcomes.

K6: The importance of designing AI and automation systems that augment rather than replace human work, where feasible.

K7: The capabilities, benefits and risks of automation, AI and digital tools including responsible use, ethical considerations and the potential impact on the workforce.

K8: The capabilities, risks and implications of on-premise, cloud-based and third party solutions.

K9: AI and automation concepts, models and limitations. The impact adoption may have on workplace culture and wellbeing.

K10: Sources of error and algorithmic bias, including how they may be affected by choice of dataset and methodologies applied, and the impact on the user and or organisation. Fairness metrics and mitigation approaches.

K11: User requirements when designing and implementing AI and automation solutions including accessibility considerations.

K12: Product development lifecycle including consideration of user experience (UX) principles such as user centred design (UCD), data informed design and experimental testing.

K13: How to assess the viability of solutions, for example testing and evaluating solutions, using test data and results, feasibility (time, cost, data quality and process maturity), and user testing.

K14: Principles and application of testing methodologies and their application in practice.

K15: Principles of human oversight and human AI collaboration to achieve shared outcomes.

K16: Feedback and evaluation loops to improve systems, processes, productivity and performance including human in the loop safeguards.

K17: Principles for designing sustainable solutions to support organisational strategies and objectives.

K18: Governance principles to ensure accountability and compliance, including methods to identify system vulnerabilities and mitigate threats or risks to assets, data and cyber security.

K19: Engagement and training approaches used with non-technical staff to understand their roles, responsibilities, and concerns when AI automation solutions are proposed. Including best practice and methods to deliver training.

K20: Methods to develop resources such as manuals, short explainers, chat-based guidance, interactive wikis and training materials.

K21: Strategies for inclusive communication with stakeholders from diverse and non-technical backgrounds.

K22: Collaborative working principles to explore AI and automation solutions and implement prototypes, pilots or proof of concepts.

K23: Mitigation strategies for post-deployment issues such as overreliance and automation bias.

K24: Principles to support project and change management delivery.

K25: Approaches to maintaining up-to-date knowledge of existing, evolving and emerging technologies and sector trends for example peer learning, online forums, AI tool release notes.

K26: The benefits of wellbeing and safe working practices.

K27: Methods for assuring compliance in AI and automation projects, including documentation of model decision-making, conducting structured risk assessments, and aligning implementation with recognised AI assurance and governance frameworks. The importance of auditability, transparency, and accountability in organisational contexts.

K28: Principles and practices of algorithmic impact assessment and workforce equality monitoring, including methods to identify, assess, and mitigate potential disproportionate impacts of automation and AI systems on different workforce groups. Organisational responsibilities under equality and employment law, and methods to evidence fairness and transparency in adoption.

K29: Principles and practices for the long-term monitoring of AI and automation solutions, including detection and mitigation of risks such as model drift, emerging bias, degraded performance, and security vulnerabilities.

Skills

S1: Review, establish, follow and or amend policies and procedures on data and information security.

S2: Follow ethical, responsible and safe working practices respecting confidentiality and sensitive organisational matters.

S3: Undertake analysis to identify if automation is viable. Including assessing risks such as data quality, process maturity and unintended consequences of AI automation projects, such as the impact on job roles.

S4: Engage with non-technical staff to understand their roles, responsibilities, and concerns when automation solutions are proposed and implemented. Adapt approach to support workforce needs when implementing solutions that impacts the workforce.

S5: Support with the introduction, adaption, and implementation of change. Contribute to constructive dialogue between leaders and employees about the adoption of AI and automation solutions.

S6: Review and complete workflow and process mapping to identify problems or inefficiencies and recommend solutions including pilots, incremental changes and scaling opportunities.

S7: Use automation design tools to suit the organisational context to configure, adapt and implement solutions for example Zapier, Make and Power Automate.

S8: Create and refine prompts for AI tools, using iterative testing to achieve accurate and useful outputs.

S9: Apply analytical and computational techniques using tools and datasets to design, evaluate, and optimise automation solutions.

S10: Integrate AI and automation technologies to collect, process, and manage data effectively, enabling intelligent and efficient system operation.

S11: Design, integrate, and test digital workflows and AI automation tools using APIs, connectors, or low-or no-code integration methods.

S12: Iterate solutions based on testing and feedback to ensure reliability, security, accessibility, and alignment with organisational needs.

S13: Identify opportunities to deliver automation. Support leaders in integrating ethical, empathetic approaches when decision-making.

S14: Support in the identification and evaluation of opportunities for increased productivity. For example, use of low-or no-code tools, streamlining processes and use of AI platforms.

S15: Make evidence based suggestions to support governance, outcomes and facilitate improvement for example cost benefit analysis.

S16: Report on productivity and efficiency savings and the opportunities for automation and where applicable when automation does not improve experience or processes.

S17: Contribute to sustainable and efficient AI and automation solutions.

S18: Support with the delivery of training to technical and non-technical user groups or audiences adapting content and format responding to feedback and organisational context.

S19: Contribute to the creation and or adaption of resources such as user guides, training materials, process documents to meet user requirements.

S20: Work collaboratively to deploy AI and automation strategies. Support where required to deal with the impact of automation for example retraining, redeployment, or upskilling of affected staff.

S21: Undertake data analysis, preparation, and conversion to support automation solutions.

S22: Present and communicate information including the translation of technical concepts into accessible materials to support clear dialogue with stakeholders.

S23: Work with others to achieve agreed outcomes or outputs. Provide evidence-based analysis and insight to leaders on the likely human impacts of automation projects.

S24: Use project management principles, techniques and tools to support the development of clear, balanced communications and briefings, articulating both opportunities and risks.

S25: Keep up to date with existing, evolving, emerging technologies and sector trends in AI, automation and technology including methods to evaluate vendor and supplier solutions.

S26: Apply ethical and human-centred design principles when scoping, developing, and deploying automation and AI solutions, underpinned by robust governance.

S27: Apply technical understanding to help align business needs with technical capabilities, supporting the development of solutions that are scalable, efficient, and aligned with the organisation's strategic objectives.

S28: Undertake assurance activities to evidence responsible AI and automation, including maintaining clear documentation of design and decision-making, contributing to risk assessments, and applying assurance frameworks to support compliance with organisational, regulatory, and ethical standards.

S29: Apply algorithmic impact assessment and workforce equality monitoring techniques when scoping, implementing, and reviewing AI and automation projects. Gather and analyse relevant workforce data, identify potential equality risks, and contribute evidence-based recommendations to support fair and inclusive adoption.

Behaviours

B1: Demonstrates empathy by actively considering the perspectives and concerns of staff who may be impacted by AI-driven change. Acts responsibly, recognising organisational efficiency goals with fairness to employees.

B2: Maintains professionalism and upholds confidentiality when discussing sensitive workforce impacts, showing respect for individual contributions.

B3: Demonstrates confidence in sharing concerns or alternative perspectives of self or others, even when under pressure to deliver efficiencies.

B4: Balances respect for leadership decisions with advocacy for employees.

B5: Support leaders to consider the impact of AI automation adoption, not just immediate organisational gains.

B6: Shows curiosity and initiative, experimenting with AI and automation, while ensuring such exploration is conducted safely, ethically, and with regard for potential impacts.

Qualifications

English and Maths

English and maths qualifications must be completed in line with the apprenticeship funding rules.

Version log

Version	Change detail	Earliest start date	Latest start date
2.0	Approved for delivery	10/12/2025	Not set