ST1512 / LEVEL 4

AI & Automation Practitioner

AI Tools, Prompting and Intelligent Technologies

MASTERCLASS

CURRICULUM READY

03

MODULE

Learning Objectives

BY THE END OF THE MASTERCLASS, LEARNERS SHOULD BE ABLE TO:

1. Explain how generative AI, chatbots and AI assistants produce outputs, including important capabilities and limitations.
2. Create and refine prompts through structured, iterative testing to improve usefulness and accuracy.
3. Compare cloud, on-premise and third-party AI options against organisational needs, constraints and risks.
4. Evaluate AI tools and suppliers using evidence about security, data handling, support, cost and technical fit.
5. Identify safe AI-enabled automation opportunities and maintain current knowledge as tools, pricing and features change.

Knowledge Coverage

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

Addressed in this masterclass. Wider programme and workplace evidence supports full competence.

Skills and Behaviours

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

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

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.

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

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

Masterclass at a Glance



AI tools

Concepts, capabilities, limitations

Prompting

Structure, testing, refinement

Solution choices

Hosting, suppliers, access

Automation

Opportunities and safe boundaries

Current practice

Release notes and evaluation

120 minute core

10-minute break

Six optional 10-minute extensions take the session to 180 minutes.

CURRICULUM READY

The Intelligent Tools Landscape

DIFFERENT TOOLS SOLVE DIFFERENT PROBLEMS

Generative AI

Creates text, images, code or summaries from instructions.

Predictive AI

Estimates likely outcomes from patterns in data.

Chatbots

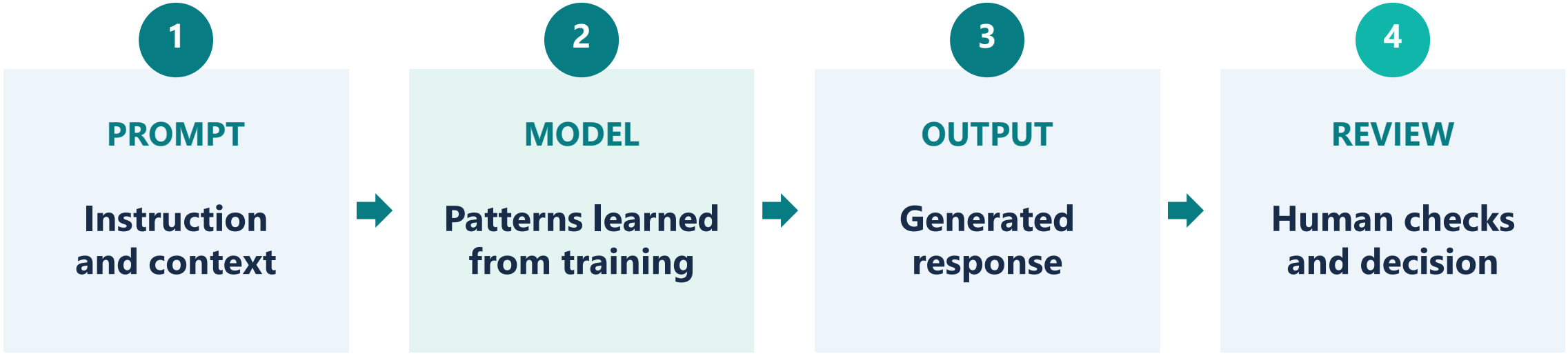
Hold a conversation through scripted or AI-generated responses.

AI assistants

Help complete tasks across content, search or workflows.

Chat: which category best describes a tool you have seen? No workplace details.

How Generative AI Produces an Output



The model predicts a plausible continuation. It does not verify truth or accept accountability.

Reflection: where could missing context or a mistaken assumption enter?

Capabilities and Limitations

Often useful for

Drafting from fictional content
Summarising supplied text
Generating options
Reformatting or classifying

Needs care with

Factual accuracy
Missing context
Bias and uneven effects
Confidential or sensitive information

Suitability depends on the task, evidence, controls and consequences.

A confident answer can still be wrong. What would you check first?

Activity: Suitable Use or Stop and Check?

FICTIONAL EXAMPLES ONLY

A Rewrite a fictional service update in plain English

B Upload named employee performance notes to a public tool

C Suggest headings for a fictional project brief

D Approve a customer refund without human review

Post A, B, C or D with: use / adapt / stop and check. Give one reason.

Chatbots and AI Assistants

CHATBOT	**Conversation is the main interface**
ASSISTANT	**Supports tasks across tools or content**
AGENTIC FEATURES	**May plan or take actions within configured limits**

Names are marketing labels. Verify the actual capability, access and controls.

Chat: what action should always need explicit approval in your fictional example?

Safe Experimentation Boundaries

USE

Fictional or approved test data

CHECK

Policy, access and data handling

LIMIT

Permissions and consequences

REVIEW

Accuracy, bias and intended audience

No real workplace data in this session. Stop and ask when approval is unclear.

A Useful Prompt Has a Clear Brief

PURPOSE

What outcome is needed?

CONTEXT

What does the model need to know?

TASK

What should it do?

CONSTRAINTS

What must it avoid or preserve?

FORMAT

What should the answer look like?

CHECK

How will a person assess it?

Prompting improves the brief. It cannot guarantee a correct or safe result.

Prompting as an Iterative Test Cycle



Change one variable where possible. Compare outputs against the same criteria.

Reflection: what evidence would show that the revision helped?

Practice: Refine a Fictional Prompt

FICTIONAL COMMUNITY CENTRE SCENARIO

Weak prompt: “Write an email about the new booking process.”

AUDIENCE	CONTEXT	CONSTRAINTS	FORMAT
Who will read it?	What changed and why?	What must stay accurate?	Length, tone and action?

Individually rewrite the prompt. Share only the prompt, not workplace content.

10

MINUTES

TIME FOR A BREAK

When we return:
solution choices, suppliers and AI-enabled automation.

Where an AI Solution Runs

CLOUD SERVICE

Supplier hosts the service. Fast access may come with external processing and changing terms.

ON-PREMISE

Organisation hosts the solution. Greater direct control can require more infrastructure and specialist support.

THIRD-PARTY TOOL

A product or integration provides AI capability. Check contracts, connections, permissions and data flow.

Deployment choice changes responsibilities. It does not remove them.

Chat: which question would you ask before choosing a hosting pattern?

Business Need and Technical Fit

NEED

Outcome and users

CAPABILITY

What the tool can do

Appropriate solution

DATA

Sensitivity and quality

CONSTRAINTS

Cost, skills and systems

A technically impressive tool can still be the wrong organisational choice.

Vendor and Supplier Evaluation

FIT

Does it solve the defined need?

EVIDENCE

How were claims tested?

DATA

What is processed, retained or shared?

CONTROL

Access, permissions and audit trail?

OPERATIONS

Support, resilience and exit route?

COST

Licence, usage and change risk?

Ask for evidence. A polished demo does not establish suitability.

Access, Pricing and Features Change

TODAY

1. **Check official product information**
2. **Record date, plan and assumptions**
3. **Recheck before build or purchase**

Zapier currently offers a 14-day trial with multi-step paid features. Eligibility and limits vary. The module does not depend on trial or paid access.

Treat screenshots and old tutorials as dated evidence.

AI-Enabled Automation Possibilities

START WITH THE PROCESS AND DECISION BOUNDARY

INPUT	AI SUPPORT	RULES	HUMAN	ACTION
Fictional request	Draft or classify	Route by criteria	Review exception	Approved update

Useful automation can remove copying while keeping judgement and approval visible.

Chat: where should the workflow stop for a person?

Zapier, Make and Power Automate

LIGHT CONTEXT ONLY

ZAPIER

Connects apps through triggers and actions.

MAKE

Uses visual scenarios to connect and transform steps.

POWER AUTOMATE

Builds flows across Microsoft and connected services.

Platform access does not approve a use case or a data flow.

No account or build is required. Concepts transfer across platforms.

Applied Scenario: Community Support Inbox

FICTIONAL ORGANISATION AND MESSAGES

Proposal: AI summarises each message, suggests a category and drafts a reply before a coordinator reviews it.

VALUE	DATA	ERROR	HUMAN	EVIDENCE
What problem improves?	What may enter the tool?	What could go wrong?	What must be reviewed?	How would we test?

Recommend: proceed with safeguards / pilot first / not yet. Give one decisive reason.

Safe Use Checkpoint

✓	✓	✓	✓	✓
APPROVED	**MINIMUM**	**TESTED**	**REVIEWED**	**RECORDED**
Tool and purpose	Only necessary data	Fictional cases and failures	Capable human oversight	Decision and evidence

STOP when data handling is unapproved, authority is unclear, consequences are unacceptable or claims lack evidence.

Raising a concern early is part of responsible delivery.

Keeping Current Without Chasing Every Release

OFFICIAL

Release notes, pricing and security pages

PEERS

Trusted communities and internal learning

TEST

Small fictional cases against clear criteria

RECORD

Date, version, plan and implications

Track changes that affect a real need, risk or decision.

Reflection: which source would you trust for a pricing or security change?

Knowledge Check

1 **A detailed prompt guarantees accuracy.**

TRUE / FALSE

2 **Which factor distinguishes cloud and on-premise choices?**

A Data flow and operating responsibility
B Logo colour

3 **A supplier claims “secure and accurate”. What next?**

YOUR NEXT STEP

4 **What should an AI-enabled workflow expose?**

NAME THE BOUNDARY

Answer privately first, then post one choice and reason.

Module 03 Assignment Plan

ASSIGNMENT PLAN

Task, evidence, submission and marking details will be demonstrated by your tutor.

Learning Objectives Revisited

CAN YOU NOW…?

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Private reflection: READY / NEED PRACTICE / QUESTION

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WELL DONE

MODULE 03 COMPLETE

AI Tools, Prompting and Intelligent Technologies

CURRICULUM READY

03

MODULE