

Agentic AI Foundations for Malaysian Graduates

Four weeks of structured thinking, guided tools and responsible workflow design

FA-0609 · 4 weeks

Agentic & Generative AI · AI for Leaders & Business · Automation, RPA & Power Platform

Learn to frame tasks for AI agents, compare tools and design a small supervised workflow with evidence checks and human ownership.

Introduction

This four-week introductory programme is designed for Malaysian graduates from business, liberal-arts and other non-technical backgrounds. It develops structured problem solving, clear instructions, guided use of agent tools, workflow design and responsible application to illustrative work scenarios.

Weekly exercises progress from a process map to a small research task, a workflow design and a final demonstration/action plan. Practical tools are selected from the source's agent and no-code ecosystem according to current access, licence and classroom resources; instructor-led demonstrations or simulations support learners where setup is technical.

The course teaches applied skills; it does not promise employment, business success or replacement of professional judgement. Use approved public or synthetic data, learning-only accounts and explicit review before any external communication, purchase, publication or consequential decision.

Learning outcomes

The programme teaches participants to:

- Explain agents, language models, tools and the limits of autonomous behaviour.
- Break a task into inputs, steps, review criteria, constraints and escalation points.
- Write and revise clear goals/prompts using evidence from observed outputs.
- Compare hosted, self-hosted and framework-based tools by capability, permissions, cost and licence.

- Run or inspect a small supervised agent task and check sources/results.
- Map a single- or multi-agent workflow with human ownership, error handling and resource limits.
- Prepare a bounded demonstration and truthful portfolio/action plan with limitations and further learning needs.

Prerequisites

- **Basic Computer Skills:** Comfort with using a computer, web browser, and common online tools (email, search engines, etc.).
- **Familiarity with AI Basics:** General awareness of AI from everyday tools (e.g. having used ChatGPT or similar) is helpful but not required. All necessary AI concepts will be introduced from the ground up.
- **English Proficiency:** The course is conducted in English, so students should be able to read and write basic English (since prompt writing and reading documentation will be involved).

No programming experience is required. Framework examples are conceptual, prepared or instructor-led; practical accounts and entitlements are checked for the chosen tool.

Training outline

1. Week 1 – Foundations and Structured Thinking

Agent concepts and use cases

- Distinguish a language model, chat interface, workflow and tool-using agent; capability boundaries overlap and are not fixed by marketing labels.
- Illustrative research, information-organisation and personal-assistant tasks; distinguish drafting from authorised action.
- Discuss work-related uses without stale labour-market statistics or promises that AI solves job scarcity.

Algorithmic and systems thinking

- Break a task into steps, rules and decision points using flowcharts or simple pseudocode.
- Identify data, tools, people, outputs, dependencies and feedback loops.
- Separate appropriate automation from human judgement; define missing-information handling and a stopping condition.

Prompt foundations

- State the goal, context, output format, criteria and constraints.

- Compare vague and specific requests and practise iterative revision.
- Inspect an agent's visible plan/actions as execution evidence, not a faithful transcript of private reasoning.

Guided activities and tool awareness

- Map an event-planning or survey-information task; practise a simple prompt with an available chatbot.
- Observe one prepared agent research demonstration in a learning environment.
- Introduce hosted agent tools such as Manus, AutoGPT deployment options and simple diagramming tools without assuming free access.

Week-one mini-project

- Design an illustrative virtual assistant's narrow task specification.
- Define inputs, permitted tools, expected outputs, checkpoints and explicit exclusions.
- Present the process map and identify assumptions needing verification.

2. Week 2 — Prompts, Tool Comparison and Supervised Research

Clear goals and iterative review

- Use context, roles, limits, criteria and examples; treat SMART-style templates as an organising aid, not a proven universal recipe.
- Plan, run, check and refine a limited task; keep prompts focused.
- Compare output quality, sources, completeness and failure cases rather than accept fluent text.

Current tools and access models

- Compare an available hosted agent with a prepared self-hosted or framework-based demonstration.
- Distinguish AutoGPT Classic from the current Platform; licence, models, setup and costs vary by component.
- Manus capabilities are evaluated in a selected learning task, not assumed reliable for every web action.
- CrewAI previews role-based coordination; historical Cognosys/AgentGPT examples are not mandatory unavailable-platform dependencies.
- Review plans, credits, model costs, permissions and data handling before using a service.

Execution workflow

- Define a goal, choose an appropriate tool, configure boundaries and observe progress.
- Use approved sources, respect login/paywall/access restrictions and stop when necessary.
- Review results and intervene on loops, errors, unsupported claims or unexpected actions.
- Do not share provider keys among students; use authorised learning accounts or a controlled demonstration.

Prompt and comparison labs

- Write a bounded information-gathering prompt and test or simulate it.
- Observe selected browser/data-to-table tasks with synthetic records and no real-account changes.
- Compare tools using observed evidence rather than unsupported performance rankings.

Week-two mini-project

- Research a fictional small business's competitors using approved public or prepared information.
- Separate observations, cited evidence, assumptions and sentiment interpretations.
- Present the agent/task setup, findings, limitations and revisions without claiming measured time savings unless actually recorded.

3. Week 3 — Workflow Design and Multi-Agent Concepts

Process mapping and control

- Map an illustrative customer-support, inventory, event or onboarding process with human/agent swimlanes.
- Define data hand-offs, review points, bounded retries, cost/time limits and failure escalation.
- Keep consequential hiring, ordering, financial and communication decisions with authorised people.

Single versus multiple agents

- Compare one tool-using agent with specialised roles such as researcher, summariser and reviewer.
- Inspect a prepared CrewAI example and its distinction between Crews and controlled Flows.
- Use AutoGen/other frameworks as conceptual comparisons, subject to their current support/version requirements.
- Multiple agents can add coordination cost and propagate errors; they are not automatically better or independent verification.

Tools, knowledge and no-code integration

- Explain approved API/tool access, source retrieval and permission boundaries.
- Compare supported connectors/actions and no-code platforms such as Zapier or Make without relying on obsolete ChatGPT Plugins exercises.
- Distinguish retrieving approved information from training a model on private data.
- Review human approval for draft replies or updates; use a manual gate where a native mechanism is not supported.

Activities and a light technical view

- Role-play data gathering, reading and summarising to expose hand-off failures.
- Draw a workflow with at least one explicit human checkpoint and test a failure scenario.
- Observe a prepared CrewAI or equivalent example; pseudocode illustrates bounded control, not a coding prerequisite.
- Keep a simple version record of prompts, assumptions, test inputs and results.

Week-three design project

- Describe the current process, proposed roles, data flow and permitted actions.
- Use synthetic cases and approved sources rather than scrape private profiles or collect sensitive hiring information.
- Present a blueprint with validation, access, governance and feasibility questions; do not claim a full implementation.

4. Week 4 – Applications, Demonstration and Next Steps

Illustrative business applications

- Compare marketing drafts, customer-support summaries, research briefs, operational assistance and creative ideation.
- Analyse data quality, evidence, professional review and organisational permissions for each scenario.
- Estimate costs and benefits using explicit assumptions; do not treat an agent as a legally accountable co-founder or guaranteed substitute for staff.

Deployment and continuing review

- Demonstrate or simulate deployment of one selected prototype to a controlled learning environment.

- Explain scheduling, triggers and reporting conceptually; scheduled/external actions need separate explicit permission in real use.
- Review monitoring, feedback, change control and when to pause or return a task to a person.
- Assess current tools by their actual documentation and licence rather than dated 2024–2025 hype or future predictions.

Portfolio and responsible communication

- Document what was actually built, designed or observed and the learner's specific contribution.
- Separate simulated examples from operational deployments; do not invent client work, percentages, achievements or credentials.
- Discuss ethical/social trade-offs and sources of further learning without guaranteed career advancement.

Final action-plan options

- Career/application track: identify two or three suitable tasks, tools, constraints, proposed pilot steps and further support needed.
- Entrepreneurial track: describe an illustrative service idea, tool costs, feasibility and customer validation assumptions.
- Choose one bounded prototype or process proposal and explain evidence, limitations, approval points and next tests.
- Present the demonstration/action plan for peer review and refine it using feedback.