

Module: Foundations & Setup

<i>Sr. No.</i>	<i>Topic</i>	<i>Key Learning Outcome</i>
1.1	AI Agent Logic	Understand fundamental differences between simple workflows and reasoning Agents.
1.2	Workspace Configuration	Gain full command over the n8n interface and environment setup.
1.3	Data Structure & Flow	Decipher how data (JSON) moves and is processed between nodes.
1.4	Authentications	Understanding and implementing authentications for secure connections to external tools (LLMs and other services like Gmail, WhatsApp, Telegram, CRMs, etc.) – OAuth2, API Token or API Key, Bearer Token etc.

Module: Trigger Node Mastery (Activation Points)

<i>Video No.</i>	<i>Topic</i>	<i>Key Learning Outcome</i>
2.1	Manual & Chat Trigger	Master the use of manual execution and chat trigger.
2.2	Webhook Trigger	Establish real-time entry points for immediate data ingestion from any external source.
2.3	Schedule Trigger	Configure precise routine automations.
2.4	n8n Form Trigger	Quickly deploy simple internal data intake forms.

2.5	App-Specific Triggers	Trigger workflows based on high-value events within integrated applications. We will pick 5 – 6 most used triggers.
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Module: LLMs with AI Agent (The Brain)

<i>Video No.</i>	<i>Topic</i>	<i>Key Learning Outcome</i>
3.1	Understanding AI Agent Node	Master the central command node that integrates Tools, Memory, and LLMs.
3.2	Working with LLMs	Understand connecting LLM to AI agent and Adjust model behaviour for consistent and reliable text output.
3.3	Embedding Node	Prepare proprietary data for AI by creating searchable vector indices.
3.4	LLM Integration	Understand methods to connect n8n to other models & open-source AI models.

Module: Memory and related Nodes (The Context Manager)

<i>Video No.</i>	<i>Topic</i>	<i>Key Learning Outcome</i>
4.1	Simple Memory	Enable short-term context for seamless follow-up conversations.
4.2	Vector Store Memory (RAG)	Deploy a long-term knowledge base for accessing vast amounts of internal data.

Module: Utility & Core Logic Nodes (The Agent's Tools)

Video No.	Topic	Key Learning Outcome
5.1	Set Node	Master dynamic data transformation and value manipulation using n8n expressions.
5.2	Conditional Logic (IF/Switch)	Build robust decision trees to guide the agent's workflow path.
5.3	HTTP Request Node	Enable the agent to interact with any external API (the most vital tool).
5.4	Code Node for Custom Logic	Implement advanced custom functionality when a standard node is insufficient.
5.5	Split node and Merge Node	Split the output to channelize it to multiple nodes or merge the output from multiple nodes.

Module: Flow Control & Reliability (Safety Net)

Video No.	Topic	Key Learning Outcome
6.1	Workflow Error handling	Implement error handling to handle workflow failures.
6.2	Merge Node for Data Union	Combine data streams from parallel processes seamlessly.

6.3	Wait Node & HITL	Integrate Human-in-the-Loop (HITL) checkpoints and time delays.
6.4	Sub-Workflow Deployment	Modularize complex logic for reusability and cleaner workflows.
6.5	Security & Best Practices	Exploring secure credentials and efficient workflow documentation.

***All the modules mentioned in this document are based on the  n8n (n8n) Platform. Some concepts would be universal, and useful for other platforms.**

***Important to Read -**

This PDF contains a list of modules for reference only.

These modules will NOT be covered in the given sequence.

The course is **project-driven**, and all topics will be taught **AI Agent-wise and project-wise**, not module-wise.

This means:

- Modules **will NOT be followed chapter by chapter**
- Topics will appear **when required by a real AI Agent project**
- Some advanced concepts may be introduced **before basic ones**, if the project demands it

Why this approach is better:

- You learn **how AI Agents actually work in real scenarios**
- Clear understanding of **where and why** each concept is used
- Faster transition from learning → building → deploying
- No theoretical overload, only **practical, outcome-focused learning**