

CONTEXT ENGINEERING:

**The Umbrella Term That Covers
Prompts, RAG, Memory, and More**

Prompting alone won't cut it.

Let's see how context powers everything —
from smarter prompts to autonomous agents.



WHAT IS CONTEXT ENGINEERING?

Context Engineering is the art of shaping everything an LLM sees to drive intelligent outputs.

It includes:

- Prompts
- User profile
- Memory
- History
- Retrieved documents
- System settings
- Tool capabilities

It's not just input... it's intelligence design.



WHAT IS CONTEXT ENGINEERING?

	PROMPT ENGINEERING	CONTEXT ENGINEERING
FOCUS	Writing great prompts	Designing the full interaction
SCOPE	Single prompt or chain	Memory + docs + tools + user
GOAL	One good response	Adaptive, context-aware output

Prompt engineering is just one piece of the puzzle.



COMPONENTS OF CONTEXT ENGINEERING

Here's what fits under the hood:

1. **Prompt Engineering** – Clear, structured instructions
2. **RAG (Retrieval-Augmented Generation)** – Brings in relevant external knowledge
3. **Memory Systems** – Tracks user history across sessions
4. **Agentic Behavior** – Planning, tool use, reflection
5. **System Roles & Metadata** – Sets rules, tone, persona

Tool Calling – API access, calculators, search, DBs



WHY IT MATTERS?

With Context Engineering, you get:

- Better personalization
- Smarter agents
- Multi-turn coherence
- Reliable tool use
- Less hallucination
- Scalable LLM apps

It's how you go from *chatbot* to *agent*.



REAL EXAMPLES

Simple Prompt: "Summarize this article."

Context-Engineered Agent:

- Knows your domain
- Retrieves company docs
- Summarizes with past conversations
- Uses tools to verify facts
- Stores insights for next time



TOOLS THAT POWER IT

Core Tools & Frameworks

- LangChain
- LlamaIndex
- Vector DBs (Weaviate, Pinecone, Chroma)
- Memory Stores (Redis, Mongo)
- Agent frameworks (CrewAI, AutoGen)
- Prompt templates (PromptLayer, PromptPerfect)



TL;DR

Prompting is a tactic.

Context Engineering is a system.

It's how we turn LLMs into adaptive, reliable, useful systems — not just text predictors.



No it's not another
recorded course, all
these are LIVE
sessions.

