

AGENTIC AI ARCHITECTURE CERTIFICATE

Program Description

Breakthroughs in large language models (LLMs) are rapidly reshaping how organizations innovate, automate, and deliver value to their customers. As AI capabilities expand, professionals who can bridge technical implementation with strategic vision are increasingly in demand.

This certificate program takes you from the fundamentals of large language models to the cutting edge of autonomous agents. You'll develop an intuition for LLM behavior, prompting, and context engineering, and learn why models sometimes hallucinate. You'll also explore Retrieval-Augmented Generation (RAG), enabling models to access private and up-to-date data.

Next, you'll move from "AI that chats" to "AI that acts" by building AI agents and improving their effectiveness through multi-agent workflows and agentic protocols. Finally, you'll step back to evaluate AI opportunities through the lens of governance, risk, security, and human oversight, so you can deploy AI responsibly at scale.

Whether you're a developer building AI-powered applications, a technical leader evaluating AI opportunities, or an executive shaping AI strategy, this program provides the practical skills and strategic frameworks to harness AI's transformative potential while navigating its risks responsibly.

Key Takeaways

- Develop AI intuition using LLMs and prompt engineering
- Build scalable AI chatbots using retrieval-augmented generation (RAG)
- Engineer intelligent workflows with advanced agentic AI frameworks
- Identify opportunities to create strategic value with AI

What You'll Earn

- Agentic AI Architecture Certificate from Cornell's Ann S. Bowers College of Computing and Information Science
- 80 Professional Development Hours (8 CEUs)
- Clock Hours: 56

Who Should Enroll

- Software engineers and developers
- Data scientists and analysts
- Machine learning engineers
- AI and NLP Practitioners
- Technical product managers
- CTO and tech executives

Total Investment

- 2 months to complete all the courses

How to Enroll

For more information on how to enroll, please visit Agentic AI Architecture Certificate (<https://ecornell.cornell.edu/certificates/ai/agentic-ai-architecture/>).

Program Requirements

Code	Title	Hours
Required Courses		
eCornell CIS641	Developing AI Intuition Using LLMs and Prompt Engineering	
eCornell CIS642	Context Engineering with Retrieval Augmented Generation (RAG)	
eCornell CIS643	Building AI Agents with Tools, Memory, and Agentic Architecture	
eCornell CIS644	AI Strategy, Governance, and Ethics	