

# AI CHAMPION

 **160 Total Hours**  
**Part-time, Flexible**

## COURSE DESCRIPTION

Deploying enterprise AI is not just a technical problem—it is an organizational, security, and human adoption challenge. Most initiatives fail not from a lack of model power, but from unmanaged security risks, hidden budget blind spots, and workforce resistance. The **AI Champions Course** overcomes these hurdles by equipping technical practitioners, security analysts, and leaders with the complete toolkit to build, fine-tune, secure, govern, and drive peer adoption of enterprise AI systems.

This comprehensive 160-hour masterclass allows professionals from any industry to bring their domain expertise and emerge with a deep understanding of how to leverage cutting-edge AI. You will learn to supercharge your workflow, accelerate productivity, and drive exponential mission outcomes—all while maintaining robust safety, privacy, and security standards.



## Relevant Today

Bridging the gap between AI power and real-world impact by solving modern security, budgetary, and adoption challenges.



## Inclusive Approach

Accommodates any schedule with flexible, self-paced tracks ranging from a 4-week intensive to a 12-month option.



## Topics Include:

Foundational neural networks, prompt engineering, model evaluation, private deployment, cybersecurity defense, risk and budget governance, team adoption strategies, and an applied capstone project.



### AGENDA COURSE CONTENT

#### WHAT STUDENTS WILL MASTER

- 1 AI Fundamentals & Smart Prompting** – Build basic neural networks from scratch in Python to see how AI learns, and master techniques for writing advanced prompts that guide AI to use external tools effectively.
- 2 Measuring Model Performance** – Learn how to test and prove whether an AI model is making accurate predictions or choices using real-world data and standard evaluation tools.
- 3 How AI Models Are Built** – Explore the full lifecycle of modern Large Language Models—from raw web data collection to fine-tuning for helpful assistant behaviors—by breaking down modern research papers.
- 4 Private AI Deployment & Customization** – Run AI models securely on your own hardware, manage memory trade-offs, and customize models on company data using lightweight fine-tuning techniques.
- 5 AI Cybersecurity & Defense** – Test AI systems for security weaknesses—like prompt hijacking or tool misuse—in hands-on practice environments to protect against top industry vulnerabilities.
- 6 Governance, Risk & Budgeting** – Create executive AI proposals, assess operational risks using federal policy standards, and build realistic 3-to-5-year budget models that account for hidden ongoing costs.
- 7 Driving Team Adoption & Training** – Overcome workplace hesitation around AI, build safe practice spaces for your team, and use automated tools to quickly create user guides and training videos.
- 8 Applied AI Capstone Project** – Solve a real-world business problem by designing, building, and presenting a complete AI solution—summarized in a technical report for peers and an executive video briefing for leadership.

#### FLEXIBLE DELIVERY TRACKS



160 TOTAL HOURS, WITH SUPPORT

##### FULL-TIME Intensive Track

4 Weeks

An accelerated self-study, 40 hour/week immersive experience designed for dedicated training sabbaticals and/or rapid operational deployment.

##### PART-TIME Flexible Track

Up to 12 Months

A self-paced option, 3–5 hours/week, built for working engineers, acquisition officers, and managers balancing full-time duty schedules.

##### Direct Access

Weekly Office Hrs

Weekly office hours available for one-on-one support from subject matter experts.

#### TIME ALLOCATION BREAKDOWN



**Totaling 160 hours, individual modules range from 12 to 25 hours based on technical complexity, lab intensity, and capstone milestones. Time is generally spent across the following areas:**

##### Lectures, Policy & Research Review ⌚ ~4–5 Hours per Module

Encompasses watching video lectures, reviewing national and Intelligence Community policy frameworks, and completing AI-guided research paper syntheses.

##### Hands-On Labs ⌚ ~9–15 Hours per Module

Composed of assessments that provide hands-on experience with tools alongside developing critical thinking skills around answering why a system should exist, what could go wrong, and how humans will interact or learn from it.

##### Capstone Project Execution ⌚ ~2–5 Hours per Module

Dedicated to fulfilling structured capstone project checkpoints across the program lifecycle, including data pipeline development, technical research paper composition, and post-submission defense review.

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