



CARDANO ACADEMY

Case Study: Blockchain for AI
Course Overview

Overview

AI has crossed one billion users and is reshaping every major industry. The question is can it do so safely and with accountability? Case Study: Blockchain for AI is a concise, 15-minute course from the Cardano Academy designed to answer that question for innovation leaders, decision-makers in enterprises, and technology pioneers who want to understand the strategic intersection of these two transformative technologies.

Through a grounded survey of AI's current landscape, a deep-dive into a live production case study, and a clear view of the high-stakes future ahead, this course demonstrates how blockchain infrastructure can solve some of AI's most urgent challenges—transparency, accountability, identity, and the ability to become a full-fledged actor in the global economy.

Course	Case Study: Blockchain for AI
Track	Enterprise
Format	On-demand E-learning
Audience	Leaders in Innovation, Enterprise Decision-Makers, Business Professionals, AI Enthusiasts
Outcome	Cardano Foundation Learn Badge (via Credly)
Duration	15 minutes

Why This Course Matters

AI is no longer a technology of the future—90% of businesses are already integrating it into daily operations. But the industry is hitting a critical wall. Advanced models operate as black boxes. Algorithms encode historical biases. Generative tools proliferate misinformation. Massive datasets attract cyberattacks. Autonomous systems make costly errors with no clear accountability. And the energy cost of frontier models is accelerating toward an environmental crisis.

Regulatory urgency is mounting: the EU AI Act's compliance requirements come into force from August 2026, and enterprises operating in the EU are already being held accountable. At the same time, competitors like IBM are not waiting. They are building verifiable AI provenance systems today.

Blockchain is uniquely equipped to address these challenges. Its immutable audit trails support transparent data governance. Its cryptographic architecture enables zero-knowledge proofs that verify AI integrity without exposing underlying data. And for the coming wave of autonomous AI agents—projected at 1.3 billion actors by 2028—blockchain provides the identity, payment rails, and accountability infrastructure that makes trustless machine-to-machine economic activity possible.

This course exists to give you and your organization the understanding and frameworks to act on this opportunity.

Key Takeaways

In this program, you will:

- **Gain** a clear understanding of AI's promise, its 6 critical sector impacts, and the 6 major obstacles currently blocking it from reaching its full potential.
- **Understand** the regulatory, competitive, and innovative forces creating urgency around blockchain-for-AI adoption right now.
- **Explore** how blockchain capabilities—immutable logging, zero-knowledge proofs, decentralized identity, and smart contracts—map directly onto AI's unsolved challenges.
- **Analyze** a live case study of Masumi Network, an AI agent protocol built on the Cardano blockchain, including its architecture, transaction model, and real-world metrics.
- **Assess** why Cardano's eUTxO model, determinism, and native asset support make it technically suited to agentic AI workloads.
- **Evaluate** the big-picture stakes of an autonomous agent economy and the role of decentralised infrastructure in ensuring it remains safe, transparent, and human-controlled.
- **Identify** the next steps for bringing blockchain and AI together within your own organisation.

Who Is This Program For?

This course is designed for professionals who need a strategic, evidence-based understanding of how blockchain can enhance and govern AI—without requiring deep technical expertise.

Representative roles include:

- **Innovation Leaders and Chief Technology Officers** who are evaluating decentralised infrastructure as a component of their AI strategy.
- **Enterprise Decision-Makers** in sectors such as finance, healthcare, manufacturing, and logistics who are navigating AI adoption and its associated compliance and risk obligations.
- **Business Professionals and Strategists** who are curious about how blockchain and AI intersect, and what that convergence means for their industry.
- **Cardano Academy Alumni** who have completed foundational blockchain courses and wish to explore applied, cross-domain use cases.
- **Anyone exploring the Masumi Network**, the emerging AI agent economy, or the practical business case for blockchain-enabled AI.

Your Learning Journey

This course is delivered via the Cardano Academy platform as a free, self-paced, on-demand e-learning experience with full mobile access—learn at your own pace, on any device, whenever it suits you.

In approximately 15 minutes, you will move through a structured narrative arc: from the state of AI today, through a concrete real-world case study, to the high-stakes future of autonomous agents—and the role blockchain must play in shaping it. Each unit is built around clear, visual explainers and a real production example you can explore for yourself.

By the end, you will have both the conceptual framework and the practical reference point needed to assess blockchain-for-AI opportunities within your own context.

Program Modules



Introduction

Sets the stage by framing the intersection of AI and blockchain. Outlines what learners will discover and why it matters right now.



Unit 1: The Overview

This unit surveys AI's growth and six critical challenges, explores how blockchain capabilities address these issues (including the EU AI Act), and concludes with a snapshot of Cardano-based projects already combining the two technologies.



Unit 2: The Case Study — Masumi

In this video, we dive into the projected agent economy, identify the four main barriers (Agent Isolation, Identity & Trust, Payment Friction, and the Accountability Gap), and demonstrate how Masumi Network, built on Cardano, solves these challenges using its unique architecture. The unit closes with live metrics and enterprise adoption.



Unit 3: The Big Picture

A lesson that explores the societal stakes of autonomous agents, using a real incident to illustrate the risks. Also makes the case that decentralized infrastructure like blockchain is a critical requirement for safe, accountable AI at scale.



Conclusion & Next Steps

This module recaps key learnings, guides learners to claim their Cardano Foundation Learn Badge, and points to further courses and resources within the Cardano Academy ecosystem.

The Cardano Academy Platform Learning Experience

Our programs are designed to meet the needs of individual learning styles while also leveraging the power of expert-verified information. This is achieved through a user-friendly learning platform that enables participants to easily navigate the program content.



On-demand E-learning:

Learn at your own pace, on your own schedule.



Gamified Reinforcement:

Engage with the material through quizzes, achievements, and interactive elements that aid retention.



Mobile Access:

Access your courses anytime, anywhere, on any device.



Open-Source Materials:

Benefit from our commitment to open-source education.

Technical and Business Learning Tracks

Cardano Blockchain Certified Associate (CBCA)

08:30 hrs 4 Modules

Intermediate Technical Certified



Available in English and Portuguese

Technical

LEARN STAKING REWARDS & CALCULATION

Technical

LEARN AIKEN

Business

LEARN GENERATIVE AI & BLOCKCHAIN

Released Fall 2026

Validate your skills and expertise with digital badges

What Our Learners Say About Our CBCA Certification Course

“

Wow...awesome and interactive lessons.

”

“

The concept was well delivered.

”

“

The course provides me with a deep understanding of hash functions and their critical role in information security.

”

“

I really enjoyed studying the Hard Fork Combinator application.

”

“

I was captivated by the analysis of the story about the Nakamoto coefficient when measuring the decentralization of a blockchain network.

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“

Very valuable information about Cardano's architecture and operation.

”

“

I fully understand the course and am very excited about these highly technical and in-depth topics...

”

Your Path to Certification

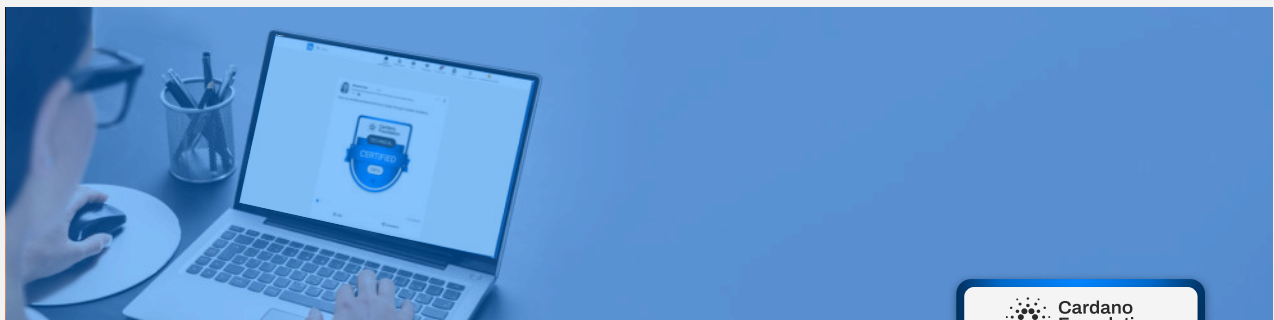
1. Complete the Course & Earn Your Badge



Upon successful completion, the Cardano Foundation grants a **verified digital badge**. This LinkedIn-compliant credential validates your new skills and expertise.

2. Advance to a Certified Associate (CBCA)

For learners wishing to advance their knowledge, the next step is the Cardano Blockchain Certified Associate (CBCA) exam. This recognized professional certification validates your technical and strategic blockchain knowledge.



Practice Exam and Completion Badge



Certification: \$99,
Online, 90 min., 50 Questions



LinkedIn-Compliant
Credential via Credly

In Partnership with Pearson VUE and Credly

Meet Your Academic Team and Subject Matter Experts

The Academy team is made of Education, Enterprise, and Technical Talent, with 15-20+ years of experience each. We work closely with our subject matter experts to ensure quality, accuracy and relevance.

The Academic Team



Nadia Mannell
Director



Andrea Derman
Business
Development
Manager



Vanessa Hurhangee
Education Manager



John Greene
Technical Blockchain
Writer



Heidi Staples
Editor & Instructional
Designer



Niklas Göke
Business Blockchain
Writer

The Subject Matter Experts



Thomas Mayfield
Team Lead -
Decentralized Trust
and Identity Solutions



Michiel Bellen
Core Integrations
Team Lead



Denicio Bute
Community Manager



Matthias Benkort
Technical Director of
Open Source
Development



John Wright
Senior Legal Counsel



Nicolas Cerny
Governance Lead



Fabian Bormann
Team Lead -
Ecosystem
Engineering

Trusted by Global Partners



10,000+ registered learners

About the Cardano Academy

The Cardano Academy provides **quality-verified, up-to-date blockchain education and enablement**. Our offerings are designed to empower individuals and enterprises with the knowledge and skills needed to succeed in the evolving world of blockchain.

We provide a range of learning opportunities, from self-paced online courses and corporate masterclasses to diploma programs and professional certifications. Our mission is to foster a global community of educated, capable, and innovative contributors to the Cardano ecosystem.

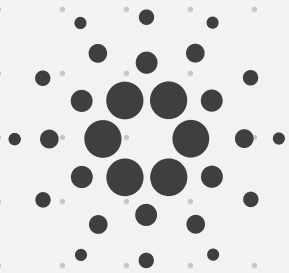
Ready to Begin?

Unlock the power of Cardano and take the next step in your blockchain education.



Register for Free at:

<https://cardanofoundation.org/academy>



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