### **Project ID 1300094**

https://milestones.projectcatalyst.io/projects/1300094

# Empowering DeSci with Marlowe: A Free Course on Real-World Blockchain Applications



**M2-PoA-v3 - Evidence of Completion** 

**Delivery date: 8/26/2025** 

Coordinator: Rivero Martín, PhD. (martinnicolasrivero@gmail.com)

#### **Milestone 1 Summary (for context)**

Milestone 1 focused on establishing the foundation of the *DeSci Quark* project (Project Catalyst ID: 1300094), an educational initiative aiming to bridge decentralized science (DeSci) and the Cardano ecosystem. During this phase, the team completed the initial 30% of the course content, launched the project's web presence and communication channels, and laid the groundwork for platform development.

#### Key accomplishments included:

- Creation of a clearly branded identity (*DeSci Quark*), with a dedicated domain (<u>desciquark.com</u>) serving as the central hub for the course and community.
- Development of a detailed course structure covering 8 modules, up from the 6 initially planned.
- Delivery of 16 recorded and subtitled videos, along with quizzes and extra materials for Modules 0–2.
- Publication of an initial landing page (in English and Spanish) and a platform framework built on WordPress + LearnDash.
- Activation of official social media channels (X, LinkedIn, Instagram).
- Collaboration with 6 international contributors, each delivering insights on blockchain, legal, scientific, and decentralized topics.

In addition, feedback from Milestone 1 reviewers was addressed through:

- Clarification of technical terms (e.g., distinction between Cardano sidechains and partner chains like Midnight).
- Public sharing of previously restricted mockup links.
- Centralization of all deliverables and course materials in a structured GitHub repository: <a href="https://github.com/desciquark/desci-cardano-course">https://github.com/desciquark/desci-cardano-course</a>

#### **Introduction to M2:**

This second milestone is part of the **DeSci Quark project – Project ID 1300094**, which aims to develop and launch an educational course focused on **Decentralized Science (DeSci)** within the **Cardano ecosystem**.

During this phase, our efforts were focused on:

- Completing the remaining 70% of the course content,
- Conducting **pilot testing** with structured feedback,
- And refining the platform functionality and user experience.

#### **Highlights:**

- 1. 8 modules featuring 16 international speakers from academia, startups, communities, tech companies, fintechs, and Cardano ambassadors.
- 2. 19+ hours of recorded video content, combining theoretical lessons and practical activities, with subtitles available in both Spanish and English.
- 3. 8 multiple-choice quizzes, including a comprehensive final exam.
- 4. Step-by-step tutorials on:
  - a. Cardano wallet creation
  - b. Delegation to a stake pool operator (SPO) and DRep
  - c. Building DeFi on Cardano
  - d. Creating scientific FTs and NFTs
  - e. Developing 5 smart contracts for science using Marlowe
- 5. Beta Testing Program: 30+ applicants, 15 selected, and 11 provided detailed feedback, resulting in a 70-page improvement document.
- 6. Rewards for testers: 11 participants received 50 ADA each plus an NFT certificate.
- 7. 2 GitHub repositories launched: one for tracking course activities and another dedicated to smart contracts.

8. Community engagement: A Telegram group with 10+ active participants (as expected, and growing).

The following sections provide detailed evidence demonstrating how each of the approved **acceptance criteria** for this milestone has been successfully met.

#### 9. Course Content Completion:

**Approved on Acceptance Criteria:** The remaining 70% of course content is: recorded, edited, and uploaded; all videos and guides are subtitled in both Spanish and English.

**Description:** During this second milestone, we successfully completed the recording, editing, and uploading of the remaining 70% of the course, achieving full program delivery for participants.

This milestone builds upon the initial curriculum presented in Milestone 1 (<u>Initial Program Link</u>) and updates it to the final and complete version

and updates it to the final and complete version (Final Program Link),

which includes minor structural adjustments across the modules to improve pedagogical flow and learning experience.

A major enhancement compared to the previous milestone is the participation of 16 international speakers, more than double the 7 originally confirmed. These contributors represent diverse domains—technology, science, law, education, and the Cardano community—bringing global insight to the course.

#### **List of Speakers:**

- 1. Martín Rivero, PhD Course Coordinator
- 2. Sebastián Pabón Andamio
- 3. Carolina Menchaca, MSc DeSciWorld
- 4. María Fiorentini Mujeres en Crypto
- 5. Tomás Ortega, BSc Mushroom Protocol
- 6. Rodrigo Oyarzún CHIL SPO
- 7. Federico Weill, PhD TxPipe
- 8. María Goreti Freitas, PhD DeScier
- 9. Jose Iadicicco ADA Solar & ALBA
- 10. Diego Torres Borda NGO Bitcoin Argentina

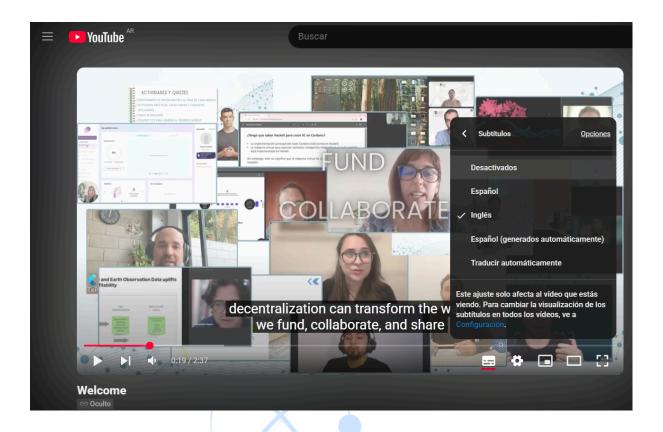
- 11. Daniela Alves, MSc Intersect & GovChainLab
- 12. Damián Hryb, Eng. CardanoTree
- 13. Agustín Franchella Cardano Ambassador
- 14. Ignacio Fabre, Eng. Rather Labs
- 15. Juan Beliera, Eng. Rather Labs
- 16. Jorge Nasanovsky Citaldoc

The complete course now includes over 19 hours of recorded video content, all of which is fully subtitled in Spanish and English to ensure bilingual accessibility.

In Module 5, we originally planned to develop 4 smart contracts as practical components. However, based on evolving needs and community feedback, we expanded this section by integrating starter templates of smart contracts along with step-by-step explanations. We also introduced a new central topic: scientific co-authorship and collaboration on academic papers using blockchain, which emerged as a recurring interest during the pilot testing phase.

#### **Evidence:**

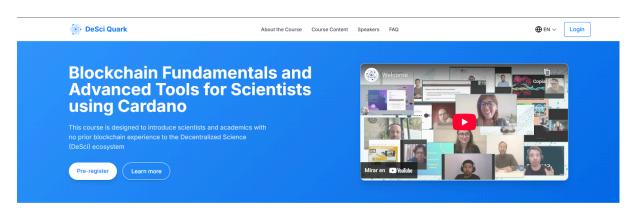
- All video lessons, guides, and quizzes are publicly available on GitHub:
   <u>DeSci Quark Cardano Course Repository</u>
- In Milestone 1, we listed 16 videos. As of this milestone, 60+ videos are available.
- In response to tester feedback, we created a dedicated GitHub repository for smart contracts:
  - Marlowe Smart Contracts Repository
- All videos include bilingual subtitles (Spanish and English), accessible via YouTube's subtitle settings.



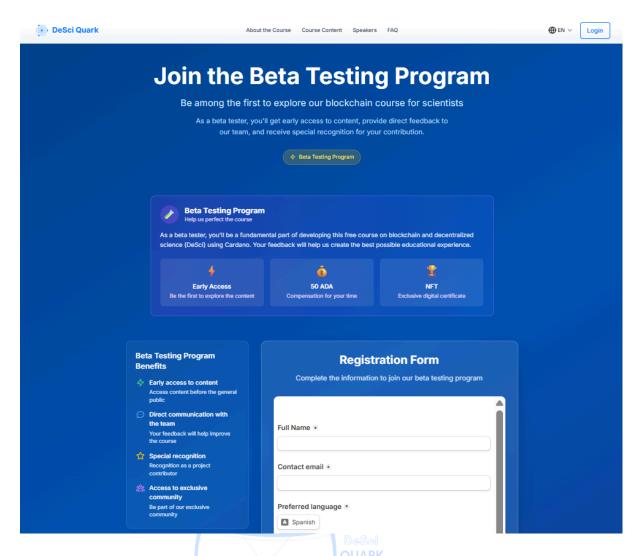
#### 10. Pilot Testing and Feedback Collection

Approved on Acceptance Criteria: Pilot test is conducted with 10 participants, incentivized with 50 ADA each. Feedback is collected via structured surveys and used to refine content and platform usability.

**Description:** To validate the course before public release, a pilot testing phase was launched through the official DeSci Quark website (<a href="https://www.desciquark.com/en">https://www.desciquark.com/en</a>), where a "**Pre-register**" button was prominently featured on the homepage.



This directed users to an embedded Tally form: <a href="https://www.desciquark.com/en/pre-registration">https://www.desciquark.com/en/pre-registration</a>



Survey form (via Tally).: <a href="https://tally.so/r/mKyPqk">https://tally.so/r/mKyPqk</a>

37 people signed up to be beta testers, taking into account both English and Spanish, exceeding our original expectation of 10. A screenshot of the total signups is included as supporting evidence.



Given the higher-than-expected number of applicants, we decided to select 15 testers, anticipating that some may not complete the course. The final selection was based on multiple criteria including language preference, geographic diversity, background profile, verification, and prior knowledge.

• A spreadsheet containing all 37 responses, including a final tab listing the 15 selected testers, is available here:

#### Link to Excel with full responses and selected testers

Feedback was gathered and implemented in stages, following a hypothesis that early testers would likely encounter more usability and content improvement issues. Based on this, the platform was iteratively refined throughout the testing cycle.

#### **Evidence:**

- A **list of the 15 selected testers** is included in the **third tab** of the application response spreadsheet (<u>Link</u>) called "**Selected Testers**", with the round number in which the email and access to the course were sent to the tester, preferred language and contact email.
- Welcome email sent to selected testers: Welcome Document – Google Drive link
- Follow-up message sent to non-selected testers for upcoming evaluation rounds: Next Round Info – Google Drive link
- **Structured feedback form** used for evaluation: Tally Form https://tally.so/r/3x70XE
- Summary of Feedback Received:

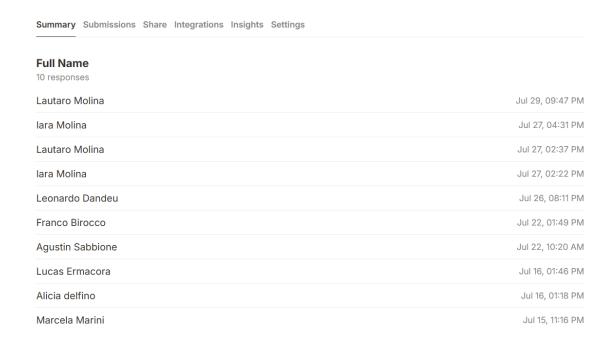
Formulario de Feedback - Testers DeSci Quark

3 submissions · Edited Jul 21

Feedback Form- Testers DeSci Quark

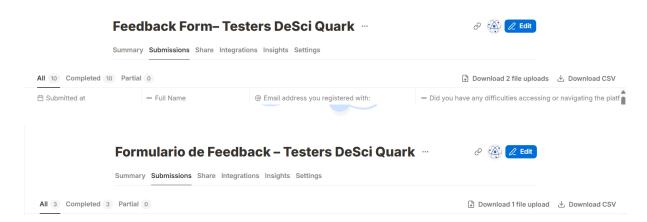
10 submissions · Edited Jul 1

We received 13 feedback responses, but 2 of them were repeated submissions by two testers because they made a mistake when sending their wallet to receive the transactions, so the different responses obtained are 11.



It can be seen that there are two names repeated in the list of responses in Spanish.

Below, we show how we downloaded the 13 responses: 10 in Spanish (two were duplicated due to an error in the wallet submission) and 3 in English. Both files in CSV format were added to the "Feedback Folder".



A "**Feedback Folder**" containing all individual tester feedback submissions is attached: [link].

#### • Before-and-After Comparisons with Visual Evidence of Implemented Changes:

We have included an 82-page document summarizing the most relevant feedback received from each tester (duplicate comments removed), along with screenshots of their original observations and the corresponding improvements made based on their input:

[link to feedback summary document].

This **staggered testing approach** allowed us to iteratively collect and apply user insights to improve:

- Course content clarity
- User experience (UX) design
- Platform navigation
- Communication with learners

These refinements directly supported the platform's readiness for public launch. This phased testing approach provided valuable insights that were integrated into content, UX design, platform navigation, and user communications in preparation for the public launch.

#### 3. Full Course Launch and Promotional Campaign

**Approved on Acceptance Criteria:** The course was publicly announced on at least three platforms, including social media and academic channels.

**Description:** The objective of this campaign was to announce the completion of course recording and to invite the public to join as beta testers, access our platform, complete the course, provide feedback, and receive 50 ADA and an NFT certificate for their participation.



In addition, the campaign was also featured on the official DeSci Quark website, where a dedicated registration form and tester-specific page were embedded, as shown in the previous section.

- Posting dates: [June 11, 2025]
- Reach or impressions:

The social network that we had the most engagement with was X, we added current metrics.



We also created a landing page in Spanish and English associated with the Desci Quark main page with a Tally insert for tester registration.

https://www.desciquark.com/en/pre-registro/

#### 5. Community Engagement

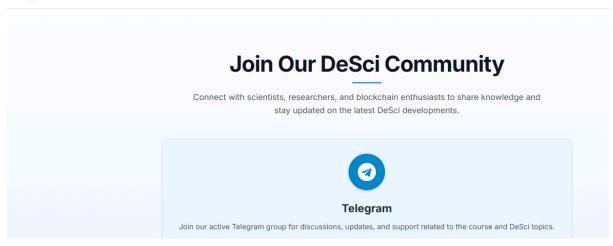
**Approved on Acceptance Criteria:** An online community group was created with at least 10 active members.

#### Evidence:

• A **Telegram group** was created for community interaction. The group link is included below, along with **screenshots showing user activity**.

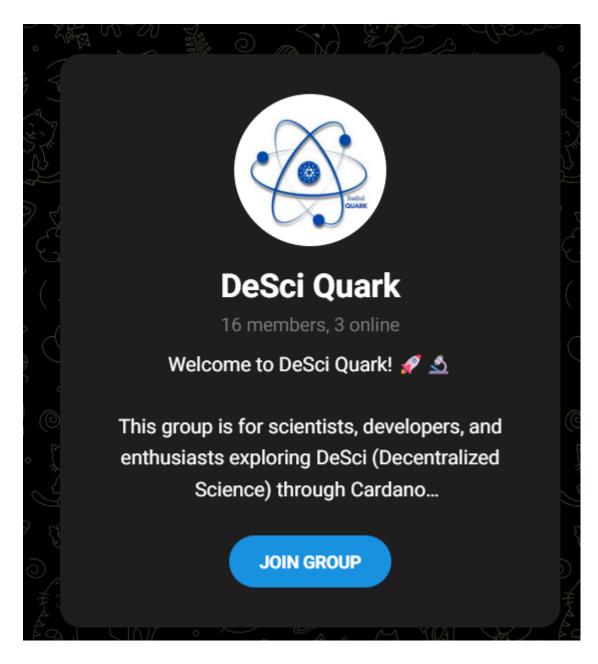
TG: Link: <a href="https://t.me/+806RX2m67BIzOGO5">https://t.me/+806RX2m67BIzOGO5</a>







 Engagement metrics, including number of posts, comments, and unique users, are also provided.



Although at this stage we mentioned that only testers (who used Telegram) would participate, there are now 16 of us.

#### 6. Certificate/NFT & ADA Distribution

**Approved on Acceptance Criteria:** Digital certificates (NFTs) were issued to the 10 pilot testers, and 50 ADA were transferred to each participant.

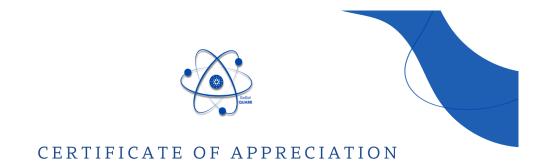
Evidence: A table is provided listing the participants who received **50 ADA transfers** and **NFT certificates**, including the corresponding **transaction IDs (tx IDs)**. The tab is called "**Testers Txs**".

[Table with participant list and tx IDs]

Thank you email to testers and notification of sending 50 ADA to 11 registered wallets. (link)

Thank you email to testers and notification of sending 11 NFT certificates to registered wallets. (<u>link</u>)

Example of certificate in NFT sent:



## Agustin Sabbione

#### BETA TESTER OF DESCI QUARK



THANK YOU FOR YOUR VALUE FEEDBACK AS A DESCI QUARK BETA TESTER

COMPLETE AT AUGUST 2025

 $\frac{https://adastat.net/transactions/55f62744f80159e915175f6b187509e53cb98732a14e4f04e75a}{c2a08f6b5a4d}$ 

#### 7. Platform Demonstration

**Description:** A video walkthrough of the course platform was created to showcase its navigation, accessibility features, key functionalities, available content, and testing mechanisms.

#### **Evidence:**

**Registration**: link o https://course.desciquark.com/register/?ld\_register\_id=2160

Link to the demonstration video: [Video Link] o https://youtu.be/39Al2qRMUhs

#### 7. Next Steps

- Once Milestone 2 is approved, we will update the button on our main page (<a href="https://www.desciquark.com/en">https://www.desciquark.com/en</a>) from "Pre-register" to "Start Course", redirecting users directly to the course.
- After that, we will begin promoting the course on social media and in communities related to Cardano and science.
- In April 2025, we had the opportunity to present DeSci Quark during a meeting at the Cardano Bolivia Summit:
  - https://x.com/CardanoSummitBo/status/1916998364580778388
  - https://x.com/CardanoSummitBo/status/1917730690067751304
- In September 2025, we plan to attend the Cardano Summit to officially present the DeSci Quark project.

#### 8. Milestones reviewers

#### From Milestone reviewer Not Approved The PoA has been executed in great detail, and I really appreciate the team's transparency and meticulousness. However, there are a few areas that could be improved: • Please check the GitHub link in this sentence: "The full report is available via the Drive -link- or can be reviewed on our GitHub (link)." • Most of the video links mentioned in the "Tester Feedback Summary" file have incorrect hyperlinks. For example, on page 11, the video link text shows https://desciquark.com/v/citaldoc, but the hyperlink actually points to https://desciquark.com/v/cardano. . Please review the quizz.md files for modules 3 to 7, as they either do not lead to the correct files or link to restricted-access content. • Regarding the Milestone module, since everything is publicly available to the community, it's important to note that Catalyst emphasizes the responsibility of protecting sensitive user data (e.g., emails, social media accounts, wallet addresses, etc.). Please review the related files carefully and remove any sensitive information. Submitted at: August 28, 2025 at 1:14 PM From Milestone reviewer **Not Approved** Great content and detailed explanation, I checked the POA2 submission and I believe it is complete according the criteria. Though as the other reviewer found some bugs in links and content, I think it is better for you to correct them and resubmit. Submitted at: September 1, 2025 at 9:24 AM

#### Dear Milestone Reviewers,

Thank you sincerely for your thoughtful and constructive feedback. We greatly appreciate your careful review of our PoA submission and your comments, which have helped us improve several important aspects of the project.

We apologize if any of the links were not functioning correctly during your review. We have now reviewed and corrected all hyperlinks, including those in the GitHub repository and the "Tester Feedback Summary" document.

You were absolutely right regarding the quiz.md files for Modules 3 to 7, as some were not publicly accessible. We have now fixed the permissions, and for your convenience, here are the updated links:

- Quiz 3: <u>Google Docs</u>
- Quiz 4: <u>Google Docs</u>
- Quiz 5: Google Docs
- Quiz 6: Google Docs
- Quiz 7: Google Docs

We have also updated all quiz-related links directly in our GitHub repository to ensure consistency and easy access:

https://github.com/desciquark/desci-cardano-course

Additionally, in response to your recommendation regarding data privacy, we have replaced the original "Tester Registration" Excel file with a new anonymized version

https://docs.google.com/spreadsheets/d/1FVHhtXvm8UEdLW-GfBPON9L\_iJ8Pmhk/edit?usp=sharing&ouid=115671773133812567710&rtpof=true&sd=true

#### In this updated file:

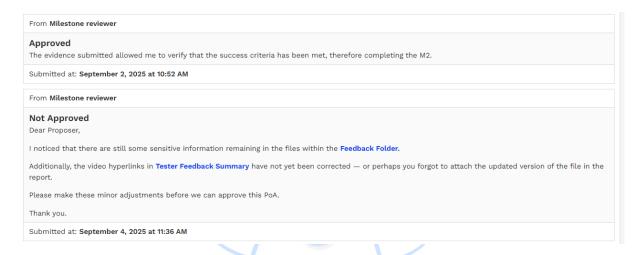
- Testers are now identified only by numerical IDs
- Emails, wallet addresses, and social media profiles have been removed
- All other relevant data has been retained, including ADA and NFT transaction records
- This new file has been included in the updated documentation

https://github.com/desciquark/desci-cardano-course/blob/main/PoA/PoA/milest one-2/Testers/README.md

# Anonymized Spreadsheet of Applicants and Selected Testers View Excel – IDs only, personal data removed per Catalyst reviewers' recommendation In compliance with Catalyst milestone reviewers' feedback, tester identities and personal information (emails, wallets, and social profiles) have been removed and replaced with anonymized IDs. All transaction data (ADA & NFT) has been preserved.

Thank you once again for your attention to detail and support. Your feedback has been extremely helpful in refining the quality and transparency of our submission.

#### 9. Milestones reviewers-second feedback



#### **Dear Milestone Reviewers.**

DeSei QUARK

Thank you very much for your valuable feedback.

Based on your suggestions, we have worked on the following improvements:

- The original CSV files in the "Feedback Folder" (exported directly from Tally) have been removed. To streamline the information and enhance privacy, we replaced them with a single Excel file containing two sheets. These contain the same data as the CSVs, but personal identifiers such as tester names, social media links, and wallet addresses have been removed.
- We have replaced the link to the initial "Tester Feedback Summary" with a new version:
  - "<u>Tester Feedback Summary V2</u>". In this version, we updated all external video links. In cases where embedded videos might not open properly, we added an alternative YouTube link using an "or" option. For example:

- o https://desciquark.com/v/ada or https://www.youtube.com/watch?v=gH2mRb7mY\_Q
- This method has been applied consistently across all video links mentioned in the feedback summary.

https://desciquark.com/v/desciworld or https://www.youtube.com/watch?v=fvYHPIH9u4s

https://desciquark.com/v/alba or https://www.youtube.com/watch?v=NF2IX6 2ASQ

https://desciquark.com/v/spo or https://www.youtube.com/watch?v=hy2RxAW9XXE

All these changes are documented in the new "Tester Feedback Summary – V2" file.

Thank you once again for your thoughtful comments and helpful suggestions — they were instrumental in improving our submission.

Warm regards,



Warm regards,
Martín Rivero
Project Lead – DeSci Quark
ID: 1300094