EDUCHAIN PROJECT ROADMAP: A DETAILED BREAKDOWN

EduChain is developing a blockchain-based platform for secure, verifiable, and accessible academic certificates. This roadmap outlines the project's phased development and future expansion.

PHASE 1: FOUNDATION (Q1 2025)

This foundational phase focuses on establishing the core technical components of the EduChain platform.
Smart Contract Development (Q2 2025):
Creation and testing of an NFT-based certificate contract (ERC721). Implementation of logic for issuing, verifying, and revoking academic certificates.
Frontend MVP and Backend Deployment (Q2 2025):
Development of a user interface (UI) for institutions to issue certificates. Development of a UI for verifiers (employers, parents) to check certificate authenticity.
Testnet Deployment (Q4 2026):
Deployment of the smart contract to Base Testnet or Sepolia. Execution of functional tests for minting and viewing certificates.

PHASE 2: BETA RELEASE (Q1-Q3 2026)

This phase involves public testing and the integration of key features to enhance platform functionality.
Launch Web App Publicly (Testnet):
Invitation for real schools to test the platform.
Inclusion of institution registration and simple verification functionalities.
PDF Generation & IPFS Integration (Q3 2026):
Automated generation of PDF versions of certificates with all associated metadata.
Storage of PDF hashes on IPFS, with links to the corresponding NFTs.
Role Management (Q3 2026):
Addition of frontend separation for "Issuer" and "Verifier" views.

Gather Feedback:

Onboarding of early testers to collect crucial user experience (UX) and functionality feedback.

PHASE 3: TOKEN INTEGRATION & MAINNET (Q4 2026)

This crucial phase marks the introduction of the native token and the transition to the mainnet.

Launch $EDU Token (ERC20):

Deployment of the project's native utility token for subscriptions, access fees, or verification credits.

Subscription System:

Institutions will pay monthly or per-certificate fees using the $EDU token.
Verifiers (employers) will pay small, gas-free fees for deep verification access.

Smart Contract Upgrade:

Inclusion of token-based access controls and advanced metadata formats.

Deploy to Base or Polygon Mainnet:

Migration of tested contracts and data to the production environment.

PHASE 4: EXPANSION & ECOSYSTEM (2026+)

This phase focuses on broad expansion and ecosystem development to maximize EduChain's utility and reach.

API + SDK for Integration:

Allowing third parties, such as universities and EdTech platforms, to integrate via API.

Mobile App:

Enabling on-the-go verification and certificate scanning.

ZK/Privacy Layer:

Integrating zero-knowledge proofs for privacy-compliant certificate verification.

Partner Onboarding:

Collaborating with government bodies, schools, and recruiters to foster adoption.

Token Utility Expansion:

Introducing a reward system, staking for trusted institutions, gas subsidies, and other token-related utilities.

OPTIONAL ADD-ONS

Certificate Templates Marketplace: Purchase custom certificate styles using $EDU.
Graduate Badges: NFTs representing student milestones.
AI Detection for Certificate Fraud: Implementing AI to combat certificate fraud.
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Disclaimer: As of June 2025, EduChain reserves the right to change and update this roadmap at any time based on the future development and strategic direction of the project. We are committed to transparency and will communicate any significant changes.
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This revised roadmap provides a clear and structured overview of EduChain's development trajectory. Would you like to delve deeper into any specific phase or feature mentioned here?