

# Blockchain Developer Learning Roadmap (Dec 2024 - Dec 2025)

## Phase 1: Foundation Building (Dec 2024 - Mar 2025)

- Learn blockchain basics and Ethereum fundamentals.
- Study Solidity and backend development with Node.js and Express.js.
- Mini-projects: Ethereum wallet app and 'Hello World' smart contract.

## Phase 2: Skill Development & Hands-On Projects (Apr 2025 - Aug 2025)

- Advanced Solidity (inheritance, security).
- Full-stack dApps using React, Node.js, and Web3.js.
- Contribute to open-source blockchain projects (OpenZeppelin, Hardhat).
- Intermediate projects: Decentralized voting app and NFT minting platform.

## Phase 3: Specialization & Real-World Experience (Sep 2025 - Dec 2025)

- Explore Layer 2 solutions, DeFi protocols, and token standards.
- Build professional-grade projects (DeFi dApp, NFT marketplace).
- Complete certifications and prepare for job applications.
- Polish portfolio, attend blockchain events, and apply for jobs.