

Tokenomics & Mechanism Design: Course Preview

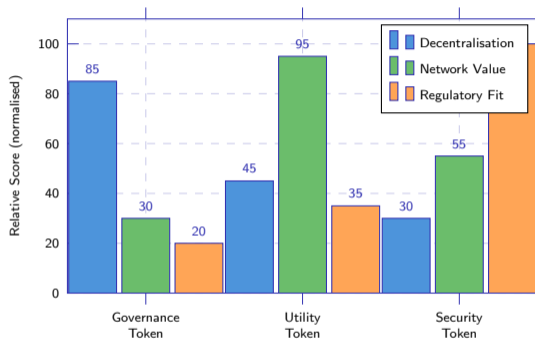
INTRO Preview

Prof. Dr. Joerg Osterrieder

University Lecture Series

March 1, 2026

Why Tokenomics Matters

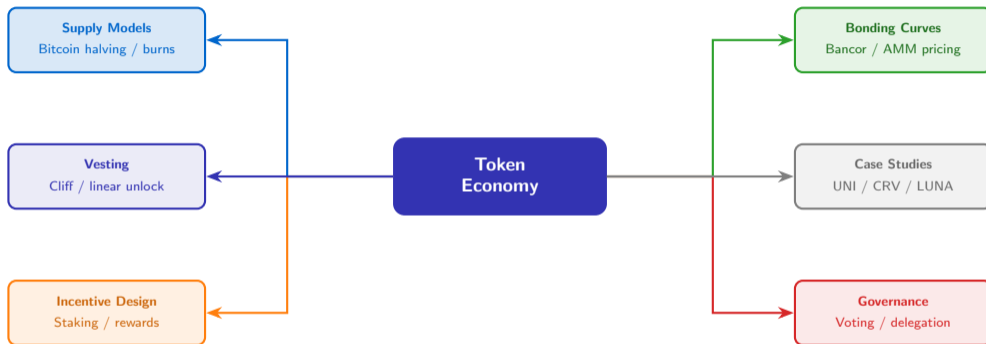


Key Metrics

- ✓ **\$2.5T+** total crypto market cap
- ✓ **95%** of new tokens fail within 3 years
- ✓ **500+** bonding curve protocols deployed
- ✓ **\$50B+** staked in governance tokens
- ✓ **10x** spread between best/worst tokenomics

determines whether a protocol thrives or fails: governance tokens enable decentralisation, utility tokens power network activity, and security tokens bridge TradFi and DeFi.

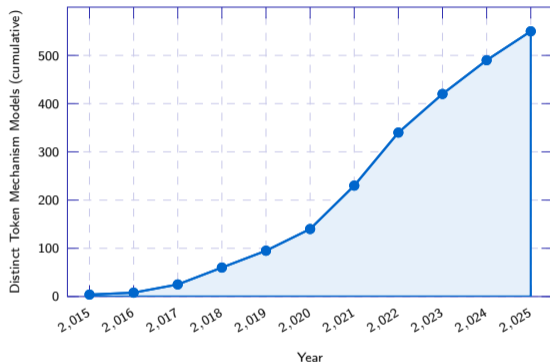
Token Economy Ecosystem



A

token economy integrates supply design, pricing mechanisms, incentive structures, governance systems, vesting schedules, and real-world case studies into a coherent whole.

Token Design Space Growth



Growth Drivers

- ✓ **DeFi Summer** (2020) explosion of AMM/yield designs
- ✓ **veTokenomics** (Curve) inspiring hundreds of forks
- ✓ **NFT economies** adding novel royalty and burn mechanics
- ✓ **L2 ecosystems** with bespoke sequencer token models

From

4 recognised token models in 2015 to over 550 by 2025, the design space has exploded — making systematic tokenomics education more critical than ever.



Prerequisites

- ✓ Basic blockchain and DeFi concepts
- ✓ Introductory microeconomics and game theory

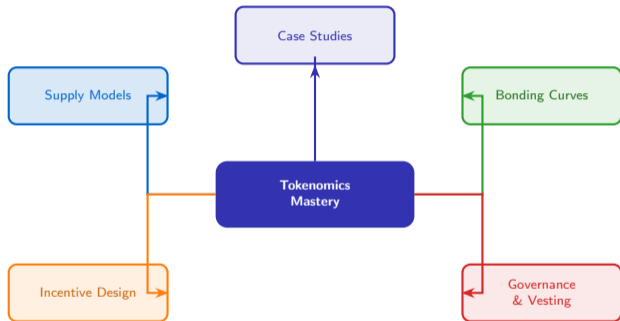
Outcomes

- ✓ Design and critically evaluate token economic systems
- ✓ Identify failure modes and apply mechanism design principles

Five modules progress from foundational token economics through bonding curve mathematics, incentive engineering, and a structured design framework to real-world case studies.

Learning Outcomes

- ✓ **Supply models** — analyse Bitcoin halving, token burns, and inflation schedules
- ✓ **Bonding curves** — derive AMM pricing, liquidity depth, and slippage
- ✓ **Game theory** — design incentive-compatible staking and reward systems
- ✓ **Vesting & governance** — structure cliff schedules and voting power
- ✓ **Real-world analysis** — dissect UNI, CRV, and the LUNA collapse



By the end you will be able to design, simulate, and critically evaluate token economic systems using supply models, bonding curve mathematics, and mechanism design principles.