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# DECENTRALIZED FUTURES: BLOCKCHAIN, CRYPTO, AND WEB3

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# Objectives

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- **Have a clear understanding on how Blockchain technology works**
  - Evolution from Traditional – Centralized – Decentralized Structures.
- **Explore blockchain applications in various fields**
  - Finance
  - Energy, Climate, Supply Chain, Identity...
- Imagine real **DECENTRALIZED FUTURES**



# Session 1: Introduction to Blockchains

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- 1. Required Viewing and Reading**
  - 2. History of digital cash**
  - 3. How does Blockchain work?**
  - 4. Public or private, permissioned or permissionless?**
  - 5. What type of token?**
  - 6. Custodial and non custodial wallet?**
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# Session 2: Bitcoin, Ethereum & beyond

- 1. Bitcoin: What are the Environmental Concerns of Bitcoin?**  
Collective discussion
- 2. What is Ethereum and who's behind? What is Proof-of-Stake?**  
A **Smart Contract? EVM?** What are **gas fees?** What is an **ERC-20 token?** What is a **NFT?** What are **decentralized applications?**  
What is a **DAO?** What is an **Oracle?**
- 3. What is the blockchain trilemma?**
- 4. What is a layer 1, a layer 2? A native and non-native token?**



# Session 3: Decentralized Finance

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1. **What is Decentralized Finance (DeFi)?**
2. **What is the difference between Traditional Finance (TradFi), Centralized Finance (CeFi) and Decentralized Finance (DeFi)?**
3. **What is a Decentralized Exchange (DEX) and a Centralized Exchange (CEX) ?**
4. **What is a stablecoin? A centralized or decentralized one?**
5. **What does tokenization mean and what is Real World Assets (RWA)?**

# Session 4: Energy, Climate and Supply Chains

- 1. What does tokenomics mean? Bitcoin, Ethereum, Lido, Filecoin comparison**
- 2. Working group on Decentralization & (A) ...Energy, (B) ...Climate & environment, (C) ...Supply Chain**



# Session 5: Decentralization & Identity

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- 1. Energy, Climate and Supply Chain use cases**  
Discussion
- 2. Decentralized identity and verifiable credential in the surveillance capitalism. What is it? How does it work?**
- 3. Final Discussion**