

Certificate Course

Introduction to Web 3 and Blockchain

Created by the Blockchain Research Lab at NCU



Introduction

This certificate course is an introduction to Web 3 and Blockchain. It is unique as you will learn conceptual knowledge in Chapter 1 and gain practical knowledge using our Web 3/Blockchain applications in Chapter 2.

Table of Contents

Contents	Page
Chapter 1	
1. Introduction To Blockchain, Crypto, and Web 3. And How Blockchain Can Be Used for Financial Transactions.....	6
2. The Market Cap Size of Cryptocurrency From 2017-2022. Crypto Tokens Have Grown in Market Size	7
3. Keyword Terms Used in Web 3 and Blockchain	7
4. Introduction to on-Chain and Off-Chain Data Storage for Blockchain	8
5. Blockchain for Tracking Shipments.....	9
6. Blockchain for E-Commerce	10
7. The Market Size of Cryptocurrency Used as a Form of Payment.....	11
8. Blockchain Domains Can Be Used To Stop Domain Censorship.....	12
9. Stable Coins Will Complete More Transactions Than Visa in the Future.	13
10. The Benefits of Stable Coins Backed by Different Fiat Currencies Being Able To Be Exchanged Between Each Stable Coin Backed by Fiat, Similar to Fx Exchange	14
11. Blockchain for Store of Value.....	15
12. Crypto Trading and How Access to Crypto Trading Benefits for the Public.....	16
13. The Benefits of Crypto Payments for Ride-Sharing and Delivery Apps ..	17
14. The Benefits of Crypto Payments for Gaming Industry	18
15. What Is Gamification and How It Can Be Applied to Online Social Communities To Incentivize Action	19
16. The Benefits of Using a Blockchain Payment System To Pay Out Rewards From Gamification for Online Social Communities	20
17. The Estimated Size of Crypto Payments for International Transactions..	22

18. The Estimated Current Volume Size Trend of Emerging Crypto Payments vs Traditional Payments.	23
19. Are Traditional Fiat Payments Being Replaced by Blockchain Stable Coin Payments. And What Year It Is Estimated That Stable Coins Will Be More Used Than Traditional Payment Systems.....	24
20. The Benefits and How Crypto Can Be Stored in Cold Storage	25
21. The Benefits of Fully Audited Gold-Backed Stable Coins.....	26
22. Benefits of Being Able To Exchange Fiat-Stable Coins for Other Fiat-Stable Coins	27
23. The Benefit of Tokenizing Commodities Such as Gold and Real Estate..	29
24. Benefits of Crypto Payments for Banking the Unbanked	30
25. The Benefits of Using Crypto Currency for the Legal Grey Market or High Risk Market Merchant Services Will Not Service.....	31
26. The Estimated Size of Crypto Payments Used in the Gaming Industry in 2022	32
27. The Benefits of Blockchain for Shipping, Logistics, and Trade Finance...	32
28. The Benefits of Cryptocurrency Payments for Tourists for Traveling Compared to Visa	33
29. The Benefits of Blockchain and Cryptocurrency Payments To Prevent Unfair Payment Monopolies Controlling Online E-Commerce Sales.....	34
30. Traditional Payments Company's Potential To Cancel Companies due to Political Bias	35
31. Blockchain Option for Chinese Suppliers Providing for US Market.....	35
32. Blockchain Use in the Legal US CBD and Cannabis Industry.	36
33. How Traditional Payments Could Possibly Be Used To Censor Political Opponents and How Blockchain and Crypto Payments Can Solve This .	37
34. How Blockchain and Crypto Payments Can Prevent Traditional Payment Companies Being Used To Stifle and Prevent Innovation That Disrupts	

Monopolies	38
35. The Benefits of Using Blockchain Vote Applications for Passing Regulations and Funding	39
36. The Benefits of Using Blockchain Donation Applications for Passing Regulations and Funding	39
37. The Benefits of Accessing the Cryptocurrency Market To Buy, Sell and Exchange.....	40
38. The Benefits of Using a Gold-Backed Stable Coin To Protect Against Stagflation.....	41
39. What Is a Video Web Streaming Platform Is and How It Can Benefit From Crypto Payments	41
40. What Is a Social Platform and How It Can Benefit From Gamified Crypto Earnings for Participation	42
41. The Benefit of Esports Player Sponsorship Using Blockchain Payments. And the Benefits of Using Crypto Payments for Participation in Events and Paying Out in Cryptocurrency Prizes.....	43
42. The Benefits of Crypto Custodian Services. Digital Assets Are Stored in Cold Storage and 100 Percent Insured	44
43. The Benefits of Using Blockchain and Cryptocurrency for Licensed Casinos and Online Game Companies	45
44. List of Countries Where Buying Cryptocurrency, and Stable Coins Such as Bitcoin Is Legal	46
45. How Liquidity Is Created for Crypto Exchanges.....	46
46. The Benefits Using Blockchain and Crypto for Large Transactions Compared to Swift.....	47
47. The Difference Between a Blockchain Utility Token and Security Token. And How Is the Howie Test Applied to Stable Coins and Utility Tokens.	48
48. What Is an Initial Coin Offering and How Much Money Has Been Raised Using Initial Coin Offerings From 2017-2022	48

49. Could the Failure of FTX Exchange, Three Arrows Investment Fund, Luna Stable Coin Been Avoided if There Was More Transparency of the Management Team? (Opinion).49

Chapter 2

1. Blockchain IPB Payment Systems52

2. Blockchain IPB Payment Systems64

3. Blockchain E-Commerce83

4. Blockchain IPB Exchange93

5. Blockchain IPB Trade Finance103

6. Blockchain INFYNIT Media Streaming and Social Platform.....119

References

Chapter 1

1. Introduction To Blockchain, Crypto, and Web 3. And How Blockchain Can Be Used for Financial Transactions.

Blockchain technology, cryptocurrency, and Web 3.0 are all innovative developments in the digital world that are rapidly transforming the way we conduct transactions, interact with each other, and exchange value. Blockchain technology is a decentralized, secure, and transparent ledger system that records transactions in an immutable and tamper-proof way. Cryptocurrency, on the other hand, is a digital asset that uses cryptography to secure transactions and control the creation of new units. Web 3.0 is the next generation of the internet that aims to create a more decentralized and open web, where users have more control over their data and interactions.

To read more, [enroll to Intro to Blockchain Course](#)