# **Bitcoin and** Blockchain Beginner **Online Course**

**Course Prospectus** 2022



**BLOCKCHAIN AND** CRYPTOCURRENCY TRAINING

**Blockchain Academy** COURSE PROSPECTUS 2022

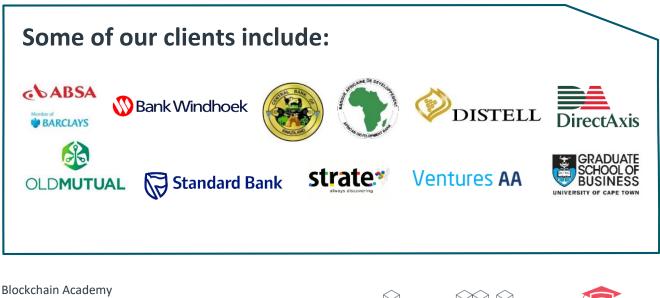
# About the **Blockchain Academy**

The Blockchain Academy focuses on capacity building in the digital currencies and blockchain technology industry through specialised training and consulting.

Cryptocurrencies, Distributed Ledger Technology (DLT) and blockchain technology, represent a number of unique opportunities for improved transparency and efficiencies across multiple industries, including financial services, insurance, identity, healthcare and supply-chain.

We help organisations across sector and industry to fully understand the intricacies and valueproposition of the technology and how it might apply to their respective businesses. Our courses are tailored to meet each organisations specific requirements and to help build the internal capacity required to make informed decisions. Our consulting team provide continued support to ensure that design, delivery and execution of the strategy and resulting product are held to the highest standard.

Whilst the Blockchain Academy is based in South Africa we have a global client base and our team have a vast amount of international industry experience and are regarded as thought leaders in this space.



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# Why is blockchain technology so important?

Blockchain technology removes the need for a centralised authority to verify trust. It creates a public ledger of all transactions, which are then traceable, transparent and leave no possibility of alteration, which in turn allows for stronger security, decreased risk and increased efficiencies.



The technology was initially developed to provide an alternative approach to payments by using cryptographic methods to provide a trust-mechanism between two transacting parties without the need for a trusted third party. Now, however, the high number of use cases for the technology is beginning to be realised and understanding this disruptive technology is becoming essential.

#### How will it impact your business? It seems certain that most businesses and a vast number of activities will feel the impact of blockchain technology and the applications based upon it.

The world's largest financial institutions have publicly declared their interest in this technology and have begun openly experimenting with it. Large technology and consulting firms such as IBM have entire business units now dedicated to blockchain.

Outside of the commercial use cases, blockchain technology also represents an opportunity to address humanitarian and philanthropic challenges such as identity and financial inclusion, which are all becoming increasingly more important to address.

We believe that blockchain technology represents the second generation of the Internet. It not only holds the potential to profoundly transform a multitude of industries, it has the potential to transform lives.

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# What services do we offer?



We offer bespoke training and consulting services from beginner levels to advanced levels of understanding on blockchain technology and cryptocurrencies as well as blockchain development.



### Training

The academy provides training in various countries. Training in South Africa takes place at AlphaCode Club in Johannesburg and at the Bandwidth Barn in Cape Town, as well as at our clients offices in various cities.

Courses typically over one full day but can be lengthened on request.

#### Consulting

The academy provides a variety of consulting services such:

- blockchain development
- feasibility of using blockchain within an organisation
- assisting an organisations developers to build, deploy and test blockchain applications
- advising on the type of blockchain

technology that is best suited to an organisations requirements

• Determining the relevant use-cases

#### Presentations

The academy offers presentations to organisations on a variety of topics relating to blockchain and cryptocurrencies.

#### Development

The academy and its partners can assist organisations with their blockchain development projects on a variety of different types of blockchain technologies.

Equip yourself with the knowledge to evaluate the impact blockchain will have on your organisation's business model.

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# **Bitcoin and Blockchain Beginner** Course

Attendees will learn what bitcoin is, its history, how to use bitcoin: storing bitcoin in a wallet, buying and selling bitcoin on an online exchange, as well as sending and receiving bitcoin from one person to another without the need for a trusted third party. The course also provides an overview of the blockchain: how transactions are stored on the blockchain, how mining works through consensus, the differences between permissioned and permissionless blockchains and why these differences are important. The course explores current use cases and opportunities this technology provides in terms of include smart contracts, payment rails, immutable ledger, proof of ownership, remittances and micro-transactions and includes alternatives to bitcoin and the Bitcoin blockchain.

The course touches on current regulation and compliance globally and in South Africa.

#### WHO SHOULD ATTEND?

The Bitcoin and Blockchain Beginner course is for individuals who are new to cryptocurrencies and blockchain technology and interested to learn more about this innovative technology.

# REQUIREMENTS

No prior knowledge of Bitcoin and blockchain is required

#### **DURATION**

- 1 day: 11:00am-15:00pm SAST/GMT+2
- Short breaks included

#### TRAINING METHODOLOGY

#### Online via GoToWebinar

• Onsite: in-person, onsite at clients offices in various cities

#### PRICE

- R850.00 (incl. vat) per person
- Discounts for groups of 3 or more Minimum of 10 people for private training

sessions



#### **COURSE OUTCOME:**

The outcome of the Bitcoin and Blockchain Beginner course is to provide attendees with a general overview of bitcoin and the blockchain.

The course provides a good foundational knowledge of how cryptocurrencies and blockchain technology work, what they can be used for and why they are viewed as being so innovative and disruptive.

The course helps attendees understand the importance of this technology in terms of building and using permissionless technology.

This course provides attendees with an insight into the future of this technology in terms of innovation and disruption of existing traditional systems and processes.

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# **Bitcoin and Blockchain Beginner Course**



# Module 1 Introduction

- Money and currency
- Digital currencies explained
- History of Bitcoin

## Module 2 The Blockchain

- 101 of a blockchain
- How are transactions stored on a blockchain
- What Bitcoin mining is
- Permissioned and permissionless blockchains

## Module 3 **Using Bitcoin**

- Where and how to get bitcoins
- How to store bitcoins in a wallet
- How to send and receive bitcoins
- How to trade bitcoins on on-line exchanges
- Bitcoin pricing and volatility

## Module 4 **Bitcoin Security**

- Security issues and the pseudo-anonymity of Bitcoin
- Security measures such as multi-signature
- Transactions
- Backing up and restoring wallets

## Module 5 Bitcoin Scalability, Risk and Limitations

- Transaction volumes and block sizes
- Block propagation speed
- Proof of Work efficiencies

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- Mining pools and centralization
- Mining rewards and incentivisation
- Bitcoin scaling proposals

# Module 6

### Use Cases and Opportunities

- Payment rails
- Immutable ledger
- Coloured coins and digital asset ownership
- **Timestamped records**
- Proof of ownership
- Micro-transactions

## Module 7 **Merchant Acceptance**

- How to integrate bitcoin as a payment method
- Benefits of using bitcoin as a payment method
- Payment processing companies
- Verification of transactions on the blockchain
- Successful case studies

## Module 8 **Bitcoin Compliance and** Regulation

- **Regulation globally**
- **Bitcoin compliance**
- Money laundering and fraud

# Module 9 The Future of Blockchain

- Smart contracts •
- Bitcoin for remittances in emerging economies
- Innovation for financial institutions
- Innovation for non-financial institutions
- The value of bitcoin and the blockchain as a technology
- Alternatives to bitcoin and the blockchain







# **Carel de Jager**



#### Carel is one of the lead instructors at the Blockchain Academy.

Carel de Jager began his career as a Chemical Engineer in the energy industry. He now works as a consultant for the Blockchain Academy, facilitating a wide range of blockchain related training courses and presentations.

Through the academy, he also delivers customised, industry-specific training to audiences ranging from the inexperienced to executive level. Carel is also a public speaker, where he often illustrates his ability to explain technical use cases for blockchain technology in a simple and practical way. He's interest in blockchain technology grew from building an Ethereum mining rig in 2016. Being an engineer, he delved into the technicalities of his newly developed hobby and quickly realised that the mathematical problems his mining rig were solving would change the world.

The study of this technology became his passion. As a consultant at the Blockchain Academy, Carel has been invited onto television shows (SABC1), coached numerous executives on the technology in South Africa and Oman. He has also presented specific aspects of blockchain use cases to clients such as the Johannesburg Chamber of Commerce and Industry, Werksmans Attorneys, Discovery and SAICA. He facilitates the Bitcoin and Blockchain Beginner, Blockchain Advanced, the Blockchain for Executives and Blockchain for Financial Institutions courses in Johannesburg and abroad. He frequently speaks at local and international conferences and events where he uses practical examples to explain deep technical characteristics of the technology.

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#### **Bitcoin and Blockchain Beginner Course**

// During the last quarter of 2016, we took the decision to further develop the ThisIsMe platform using blockchain and in particular Etherium, at the time we had no customers requesting a blockchain version, so it was definitely on the edge.

We selected the Blockchain Academy, to get the entire team and not just the development area up to the same standard of knowledge. The course covered a lot of information, delivered in concise chunks that were easy to absorb. The structure was clear, logical and effective.

But it was wasn't just about the new knowledge, the main benefits came from discussing use cases, receiving individual feedback and interacting with the tutor. Well worthy of the money and time spent and I can only thank the Blockchain Academy for putting the course together and delivering it with a very knowledgeable tutor.

Mark Chirnside, CEO at ThisIsMe

#### **Bitcoin and Blockchain Beginner Course**

// I would like to provide some formal feedback on the Blockchain training that I have recently attended at the Blockchain Academy.

I have attended the following courses:

Blockchain Beginner, Blockchain Advanced, Ethereum Beginner and Blockchain for Developers

The courses are really well structured and with the latest industry content. The content enough to ensure the attendees grasp the key concepts in the allocated time. This allows you to be at a level of understanding fairly quickly, if you did not have a prior knowledge of Blockchain and Crypto-currencies.

The lecturers are very knowledgeable and able to answer questions with ease. They are able to gauge and follow the classroom levels to ensure everyone is keeping up with the expected workbooks. The time allocated to the courses are sufficient to cover the material. There is a lot of additional information and takeaways to spend time on your own, further enhancing your knowledge gained from the courses.

> Rennie Govender, Head: Business Application Support: Corporate **Investment Banking at Standard Bank**

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#### Legal and Regulatory Implications of Cryptocurrency and Blockchain Technology Course

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I can't speak for anyone else, but in the few years I've been with CDH this was probably one of the best training sessions (definitely the best by an external presenter) that I've attended. It gave me an extremely good idea of how the blockchain and cryptocurrency space works and what's happened in the rest of the world.

> Louis Botha, Associate – Tax and Exchange Control, Cliffe Dekker Hofmeyr

#### Legal and Regulatory Implications of Cryptocurrency and Blockchain Technology Course

I attended a course yesterday with the expectation of gaining some insight into the world of blockchain and cryptocurrencies and my expectations were exceeded. Nerushka Bowan thank you for such a well delivered presentation. I highly recommend this course. //

Keshia Naidoo, Legal and Compliance Administrator, The Hello Group

#### **Blockchain for Financial Institutions Course**

// We are very excited to host the first Bitcoin & Blockchain training for the Financial Services Industry, in collaboration with the Blockchain Academy, in Mauritius. The speakers we had during these 2 days, are people who have experimented with this technology for the last 4 years, and they dived us through this immersive technology that helped the audience to understand it, clear out the misconceptions, and realize the opportunities at hand. We were provided with multiple use cases that helped the audience understand the practical side of it. Gavin encouraged participation and interaction, that created the perfect platform for exchange of ideas and disseminating the contents in a structured way. We strongly recommend Blockchain Academy. //

Ali Jamaloodeen, General Manager, AA Ventures Pty Ltd (Mauritius)

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# Payment

Please make payment one week before course commences to: Blockchain Academy Pty Ltd Bank: Standard Bank Account No: 072612193 Branch: Claremont Branch Code: 051001 Please send proof of payment to: info@blockchainacademy.co.za

Students receive 20 % discount on all our courses.

# **Group Bookings**

We offer private training sessions for groups of 8 or more individuals, online, onsite at your offices or at our training facilities in Johannesburg and Cape Town.



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# **Contact Us**

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