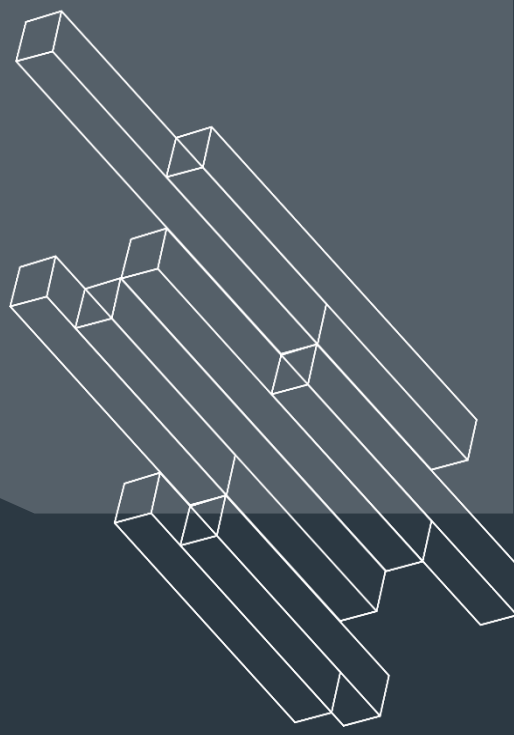
Blockchain and Cryptocurrency Courses and Consulting

SYNTECHNX Training Institute



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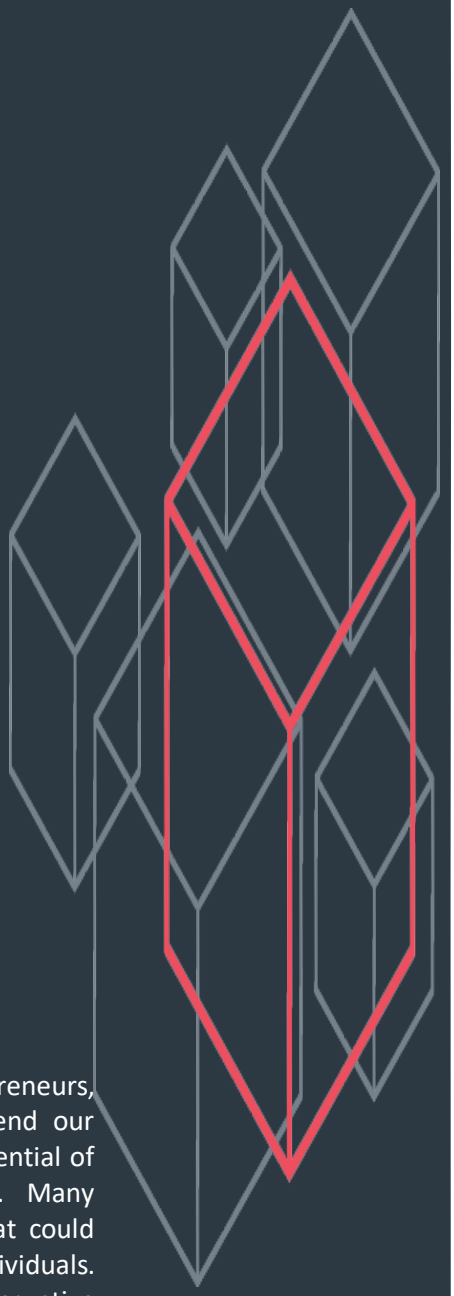

WHO AND WHAT WE TEACH

The Blockchain Institute first of its kind in South East Asia. Entrepreneurs, developers and institutions from many different industries attend our training and consulting sessions to learn about the innovative potential of blockchain technology and cryptocurrencies such as bitcoin. Many industries are now paying close attention to this technology that could radically improve business processes between companies and individuals. Experts say blockchain technology is broadly applicable, highly disruptive and could shape our future as much as AI or the Internet. But what's hype, and what's true? What should you learn first to separate the signal from the noise?' We provide these answers during our presentations, training and consulting sessions

IMPORTANCE OF BLOCKCHAIN TECHNOLOGY

1. Security

Security is the primary concern for all kinds of online activities. Lots of data are stolen, and information is breached in this world of digital. Blockchain provides a very high level of security which makes it impossible to breach for anyone because of the decentralized nature of blockchain.

2. Transparency

The blockchain technology is very transparent as everything is visible to all the participants from the beginning till date. One can see each and everything on the decentralized network which makes it very open technology. It reduces the chance for any kind of discrepancy in the system because nothing is hidden.

5. Increased Efficiency in Finance

There is no involvement of any third party in blockchain technology. Thus, it saves a lot of intermediaries cost, and all transactions happen directly from an individual to another individual. In the traditional banking system, the price is more to process financial transactions. Using blockchain technology, banks and companies can increase their economic efficiency.

6. Fraud Protection for Businesses

Due to the high transparency of transactions in blockchain technology, any kind of fraud can be easily identified. So, any fraud that has happened in the open-source ledger of Blockchain cannot stay hidden, and businesses are always protected from fraud.

7. Increased Use of Blockchain Token

Using Blockchain, a token can be used to represent any piece of information. This includes an identity for an IoT device, instructions for an algorithm, Origin Information about a product, patents, a vote in the election, an energy Kilowatt, a certificate credit, digital ownership certificate, share in a company, ownership of a house, and many more.

9. No Middlemen in Transaction

In blockchain technology, there is no chance for any kind of mediators or intermediaries in any transactions such as for digital payments, for insurance claims, for asset management, for the stock exchange, for land registry and many more.

10. Smart Contracts

A smart contract is a contract where specific situations and conditions are specified, which helps in executing a predefined task automatically. The blockchain technology is beneficial in the innovation of automating predefined action execution. The goal of smart contracts is to reduce the cost of the transaction, enhancing the execution speed, and providing security of a higher level when compared with traditional law contracts. There are many applications of smart contracts such as supply chain management, voting systems, healthcare data, personal information access, identity access, payment and rent agreements, royalty distribution agreement and intellectual property rights understanding.

12. Prevention of Data Leaks and Hacking

There have been numerous hacking and data leaks incident in the past that has shaken the trust of people to keep their data and personal information with companies. But with the use of blockchain technology, Data and information are very much secured, and there is no possibility of any kind of data leaking and hacking.

BLOCKCHAIN DEVELOPER SALARY

It was estimated by International Data Corporation (IDC) that there would be the fastest growth in Blockchain technology adoption in the years 2017-2022. Blockchain developers have been receiving a handsome salary currently. In the United Kingdom, Blockchain Developer's salary ranges from $ 60,000 USD- $ 140,000 USD per year. In Canada, a Blockchain developer can earn $ 85,000 USD on an average while experienced ones can make up to $ 175,750 yearly. A Blockchain developer in Silicon Valley, US, can make $ 158 000 USD as an average annual salary whereas, a blockchain developer can earn anything between $ 120,000 USD - $ 180,000 USD in Switzerland's Crypto Valley.

Currently the Philippines is not ranked in any global index for having proficient or highly skilled blockchain programmers - so as of 2021 there is no data on Philippine based blockchain salaries. However, SynTechNX will be the driving force for the development of Philippine based Blockchain software engineers and as such you will be the highest earning programmers in the future in our nation.

SOME OF OUR CLIENTS INCLUDE:

COURSE LIST

BLOCKCHAIN TECHNOLOGY COURSES		
COURSE LIST	**DURATION**	**CERTIFYING BODY**
Bitcoin and Blockchain Beginner Course	Week 1	SynTechNX
Blockchain Advanced Course	Week 4	SynTechNX
Blockchain Executive Course	Week 5	SynTechNX
Blockchain For Financial Institutions Course	Week 6	SynTechNX
Blockchain for Developers Course	Week 9	SynTechNX
Ethereum Beginner Course	Week 10	SynTechNX
Ethereum Developer Course	Week 13	SynTechNX
Legal and Regulatory Implications of Cryptocurrency and Blockchain Technology Course	Week 14	SynTechNX
Cryptocurrency Trading for Beginners Course	Week 15	SynTechNX
Blockchain and Insurance Innovation Course	Week 16	SynTechNX
COURSE LIST	**DURATION**	**CERTIFYING BODY**
Certified Blockchain Professional	Week 17	EC-Council

Why is blockchain technology so important?

Blockchain technology removes the need for a centralized 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.

Simpler and faster

Reduced costs

Increased trust

Tracking and transparency

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 realized 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.

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

SynTechnx training Institute provides training in the Philippines.

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 organization
- assisting an organizations developers to build, deploy and test blockchain applications
- advising on the type of blockchain technology that is best suited to an organizations requirements
- Determining the relevant use-cases

Presentations

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

Development

The academy and its partners can assist organizations 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 organization's business model.

ACADEMIC CURRICULUM

~~Bitcoin~~ and BlockchainBeginner 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 an opportunity this technology provides in terms of include smart contracts, payment rails, immutable ledger, and proof of ownership, remittances and micro-transactions and includes alternativesto bitcoin and the Bitcoin blockchain.

WHO SHOULD ATTEND?

- The Bitcoin and Blockchain Beginner course is for individuals who are new to cryptocurrencies and blockchain technology
- Individuals who are interested to learn more about cryptocurrencies such as bitcoin and blockchain technology.

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.

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

Module 6
Use Cases and Opportunities

- Payment rails
- Immutable ledger
- Colored 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

Bitcoin and Blockchain Beginner Course

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

Blockchain AdvancedCourse

The Blockchain Advanced course provides a more in-depth understanding of bitcoin and the blockchain and delves deeper into the concepts covered in the Bitcoin and Blockchain Beginner course.

The course goes further into bitcoin mining, mining pools, bitcoin transactions on the blockchain, software clients and front-ends, service providers that provide wallet services, APIs, payment gateways, explorer services and blockchain asa service

The course provides an overview of Blockchain 2.0 topics such as smart contracts, smart property, side chains, decentralized services, world computers and other exciting and innovative services and opportunities currently being used around
the world.

WHO SHOULD ATTEND?

Individuals who have a basic understanding of cryptocurrencies and blockchain technology or who have attended our Bitcoin and Blockchain Beginner course

Individuals who are interested to delve deeper into how blockchain transactions work, complex concepts such as Merkle Trees, hashes, nonces etc

COURSE OUTCOME:

The outcome of this course is to provide attendees with a comprehensive, multi-faceted understanding of key blockchain-related concepts and will have developed the level of technical skills required to achieve specific business goals.

Attendees will be able to identify suitable use cases for different blockchain technologies in order to solve key business issues and assess the risks vs. benefits of using blockchain technology instead of existing technology platforms.

As well as understanding the theory attendees, will also review real-world examples of best in case blockchain technology applications in order to see how transformative business models can be created.

Attendees will gain an insight into the future of this technology in terms of innovation and disruption of existing traditional systems and processes.

Blockchain Advanced Course

Module 1
Introduction

- The Problem of Digital Cash and Double Spending
- Nodes and Mining
- Byzantine Generals' Problem

Module 2
Cryptography

- Hashes
- Proof of Work
- Elliptical Curve: Private and Public Keys and Digital Signatures
- Hierarchical Deterministic or HD wallets
- Block Structure

Module 3
Transactions

- How Transactions are Structured
- Introduction to Segregated Witness (SegWit)
- Merkle Trees

Module 4
Smart Contracts

- High Level Introduction to Bitcoin Scripts
- Explanation of P2PK, P2PKH and P2SH
- Multisi-gnature and Use Cases
- Micropayment Channels
- Open Asset Protocol and Colored Coins
- Evolution of Smart Contracts Solidity and Ethereum

Module 5
Layer Two Solutions

- The Bitcoin Scaling Debate
- Lightning Network

Module 6
Risk and Challenges

- Hard Forks and Attacks
- Governance and Risks of Centralization
- Hype Cycles
- Permissionless vs. Permissioned Blockchains
- Initial Coin Offerings (ICOs)

Blockchain ExecutiveCourse

The Blockchain Executive course is designed for C- level executives, analysts, procurement, innovation, legal and compliance teams, IT specialists, senior strategists and risk managers who wish to fully understand the relevance and importance of blockchain technology, including cryptocurrencies such as bitcoin.

It will also highlight the practical applications of this technology for a variety of business use cases and help to determine how to improve business inefficiencies, streamline systems and processes and reduce costs within an organization.

WHO SHOULD ATTEND?

- CEOs
- CTOs
- CIOs
- COOs
- CFOs

IT Managers
- Finance Managers
- Compliance and Risk Managers
- Strategists
- Decision makers

COURSE OUTCOME:

Upon completion of the course executives will have gained a comprehensive, multi-faceted understanding of key blockchain-related topics and will have developed the level of technical skills required to achieve specific business goals.

Executives will be able to identify suitable use cases for different blockchain technologies in order to solve key business issues and assess the risks vs. benefits of using blockchain technology instead of existing technology platforms.

As well as understanding the theory executives, will also review real-world examples of best in case blockchain technology applications in order to see how transformative business models can be created.

It will challenge executives to establish a deeper functional understanding of blockchain and how it can impact their specific industry.

Blockchain Executive Course

Module 1
Understanding blockchain technology & cryptocurrencies

This module will provide executives with a foundational understanding of blockchain technology, how it works, its importance and how it will affect the future of business and your organization.

The session will cover a variety of different types of blockchain technologies (public, private, permissioned and permissionless), why their differences are important and how each is designed and suited to solving different problems. The governance models, where relevant, will also be discussed.

It will explore the relationship between cryptocurrencies, tokens and blockchain technology, as well as the basics of cryptography and the differences between distributed ledger technology (DLT) and blockchain technology.

Executives will learn more about the technical problems that some blockchain technologies face and attempts and solutions to solve these by the community, developers and businesses.

At the end of the first module executives will be able to answer the following questions:

- What is blockchain technology?
- How do I use blockchain technology?
- What are bitcoin, cryptocurrencies and digital assets?
- What kind of use cases exist in the financial and non-financial industries?
- What are some of the technical limitations and considerations of this technology?
- What does the future hold for blockchain technology and cryptocurrencies?

Module 2
Application of blockchain technology for innovation

The session will include an overview of the global regulatory landscape, critical concerns regulators have and how they are attempting to address these.

This module will focus specifically on the application and use of blockchain technology across several industries and how this is driving innovation, with a specific focus on the insurance and financial services sector.

The session will focus on equipping executives with skills and knowledge required to hypothesize and then validate how blockchain technology can be utilized, aligning ideas to strategic direction and operational environment.

The session will conclude with the development of a high level roadmap for implementing blockchain solutions in the clients organization.

At the end of the course, executives will have a comprehensive understanding of:

- The different blockchain technology business models
- Understand some of the most relevant use cases across various industries
- Understand the opportunities and risks this technology presents

Executives will also come away from the course with the necessary insight to make informed decisions on how to potentially use blockchain technology within their own organisations.

Blockchain For Financial Institutions Course

Blockchain technology is challenging traditional players and forcing them to re-examine their role in the payment ecosystem as the threat of disintermediation in the financial industry is bothreal and imminent.

Distributed ledgers, or blockchains, have the potential to significantly impact business models, reductions in risk and savingsof cost and capital.

The Blockchain for Financial Institutions course provides an insightinto the differences between permissioned and permissionless blockchains and where the value of each lies for the user and organizations. The course discusses alternatives to the bitcoin blockchain such as Ripple, Hyperledger, Ethereum, Chain, JP Quorum and Distributed Ledger Technology (DLT)such as R3's, Corda.

WHO SHOULD ATTEND?

- CEOs
- CTOs
- CIOs
- COOs
- CFOs
- Payment specialists
- IT Managers
- Finance Managers
- Compliance and Risk Managers
- Strategists

COURSE OUTCOME:

Attendees will have a deeper understanding of blockchain technology and its long-term implications for business and in particular how this technology can be, and is being used in the financial industry from payments, trade finance, supply chain, settlements and clearing, capital finance and identity management from KYC and AML.

This course will enable attendees to understand which type of blockchain technologies are best suited for the individual use-cases in the finance industry and how this can be applied within their own organizations.

Blockchain for Financial Institutions Course

Module 1
An Overview of Bitcoin and Blockchain Technology

- A basic history of money
- Digital money, ledgers and trusted third parties
- Basics of cryptography: hashes and digital signatures
- Decentralized, peer to peer systems and the problem of consensus (Byzantine General's problem)
- Blockchain, mining and Proof of Work (PoW)

Module 2
Smart Contracts

- Bitcoin smart contracts
- Ethereum smart contracts
- Tokens and other digital assets

Module 3
Alternate Consensus Mechanisms

Module 4
Permissioned vs. Permissionless Consensus

Module 5
An Overview of Permissioned Blockchains and Distributed Ledger Technology (DLT)

- Corda
- Chain
- Hyperledger Project
- Ripple
- Quorum

Module 6
Use Cases of Blockchain Technology and Cryptocurrencies

- Cryptocurrency and financial inclusion
- Trade finance
- Capital markets
- Identity
- Intellectual Property (IP)
- Misconceptions of blockchain and Distributed Ledger Technology (DLT) use-cases

Blockchain for Financial Institutions Course

Module 7
Initial Coin Offerings (ICOs)/Initial Token Offerings (ITOs) and Other Forms of Fund Raising

- An overview of the landscape
- What's happening in the regulation space
- Moving beyond the wild west

Module 8
Regulation

- Know-Your-Customer (KYC) and Anti-Money Laundering (AML)
- Central bank driven blockchains and cryptocurrencies
- Tax implications of cryptocurrencies
- Self regulatory bodies
- Examples of various approaches taken by regulators globally

Module 9
Looking Into the Future

- The innovator's dilemma: incumbents and disruption

Blockchain for Developers Course

The Blockchain for Developers course provides thedeveloper with hands-on experience in developingapplications using the Bitcoin Protocol.

Blockchain is an emerging technology that can radically improve banking, supply-chain management, storage ofinformation, proof of ownership and identity, thereby creating new opportunities for innovation. There are between 10 to 12 millions Java developers in the worldwith only about one thousand qualified blockchain developers.

The demand for blockchain development skills is increasing in the financial and other non-financialindustries such as healthcare, government, legal, regulation, identity and insurance.

WHO SHOULD ATTEND?

- Programmers
- Application Developers
- System Architects
- Network Architects
- Network Security Architects
- IT Professionals with programming experience

COURSE OUTCOME:

The outcome of this course is to get developers to quickly get to grips with blockchain technology and to give hands-on experience with a sample use case.

The aim of this course is to provide developers with hands-on experience to develop applications using the plugins, APIs and tools that can be used to build decentralized, distributed, ledger applications.

Developers will be able to have enough knowledge, after the course, to start building their own Bitcoin blockchain applications.

Blockchain for Developers Course

Module 1
Basic Concepts

- Bitcoin scripting language: script
- Cryptographic hash functions
- Cryptographic signatures
- Blockchain
- Transactions
- Multi-signature transactions
- Addresses
- Public and private keys
- Wallets

Module 2
Demonstration – How To:

- Create a bitcoin transaction
- Create a public and private key
- Create a digital signature

Module 3
3rd Party Bitcoin Libraries and Web APIs

- Web APIs
  - Blockchain.info
    Sample Application
  - BlockCypher
- Libraries
  - Blockchain.info
    Sample Application
  - Bitcore
    Sample Application

Module 4
Blockchain 2.0

- Side chains
- Smart contracts
- Smart property
- World computers
- Open Asset Protocol
- Decentralized services
- Decentralized Autonomous Organizations

Ethereum Beginner Course

The Ethereum Beginner course provides attendees withan overview of Ethereum and what this platform offersin terms of smart contracts.

The course explores blockchain concepts, languages, tools, and frameworks used for the development of these DApps and smart contracts. The course will coverthe basic design of the Ethereum blockchain, the functioning of the Ethereum Virtual Machine (EVM) and an introduction into smart contracts and transactions.

It includes current use cases in the Decentralized Applications (DApps) landscape and the recent surge ofinterest in Initial Coin Offerings (ICOs)

WHO SHOULD ATTEND?

- Programmers
- Application Developers
- System Architects
- Network Architects
- Network Security Architects
- IT Professionals with programming experience

COURSE OUTCOME:

Attendees will understand the true purpose and capabilities of Ethereum and Solidity as well as know why developers want to create a DApps with Ethereum.

Attendees will learn what type of applications are best suited for using Ethereum and learn about practical use-cases that this technology is being used for.

Attendees will be able to enroll for theEthereum Developer course after attending this course in order to learn how to build, deploy and test Ethereum DApps.

Ethereum Beginner Course

Module 1
What is Ethereum?

- A brief history of Ethereum
- The difference between Bitcoin and Ethereum
- Ethereum design and philosophy
- Ether: what is it and why is it needed

Module 2
The Ethereum Virtual Machine (EVM)

- Smart contracts
- Gas: paying for computations
- A simple smart contract in action
- Running contracts on the Ethereum Virtual Machine

Module 3
Ethereum Applications

- Tokens/ICO's
- Decentralized applications
- Decentralized Autonomous Organizations (DAO's)

Module 4
Securing the Ethereum Blockchain

- Mining/Nodes
- Proof of Work vs. Proof of Stake
- Other methods of securing blockchains

Module 5
Ethereum Past, Present and Future

- How is Ethereum different from when it launched?
- Ethereum Enterprise Alliance (EEA)
- An introduction to a few popular and innovative smart contracts
- Scaling issues and the plan to scale Ethereum
- Competition: other smart contracts platforms
- Plans for the future

Ethereum Developer Course

Demand for blockchain developers is increasing at arapid rate as enterprises and startups are looking to achieve efficiencies and create new business modelsenabled by Decentralized Applications (DApps) and smart contracts.

This 2-day course is designed for developers, architectsand IT Managers wanting to learn and apply blockchaintechnology to solve real-world business problems and effectively develop secure, full stack DApps on the Ethereum blockchain.

It explores blockchain concepts, languages, tools, andframeworks used for the development of these apps and smart contracts.

WHO SHOULD ATTEND?

- Programmers
- Application Developers
- System Architects
- Network Architects
- Network Security Architects
- IT Professionals with programming experience

COURSE OUTCOME:

The outcome of this course is to provide attendees with the necessary tools and information to build smart contracts and decentralized applications (DApps) using the Solidity programming language.

We will use Truffle, a popular DApp development framework to build and deploy the applications.

Attendees will have an overview of blockchain concepts and workings of the Ethereum blockchain as well as the languages and frameworks required to build decentralized applications.
Attendees will learn how to start an Ethereum node and interact with it as well as learn to compile, test and deploy a contract to the Ethereum blockchain.

Attendees will finish the course by building a web frontend using HTML/Javascript that interacts with a smart contract. Attendees will be able to write their own Ethereum applications at the end of the course.

This course aims to take you from zero knowledge on developing decentralized apps, to becoming an active early adopter who can develop an Ethereum based blockchain app.

Ethereum Developer Course

Module 1
Introduction to Ethereum Development

- What is a smart contract?
- What can you do with smart contracts?
- What can you not do with smart contracts?
  - Hard limitations
  - Practical limitations
- Smart contracts vs. Distributed Applications
- Interacting with smart contracts

A practical session will follow where attendees will run their own smart contracts. This will include:

- Using Dapps
  - Metamask
  - A practical session: Attendees install Metamask extension and run a Dapp

Module 2
Tools and Frameworks

- Metamask
- Remix online IDE
- Truffle
- Ganache
- OpenZepellin
- Web3.js
- Solidity IDE's

Module 3
Setting up the Development Environment

This is a practical session where attendees will set up their own basic development environment.

Module 4
Introduction to Solidity Development

- Introducing Solidity
- Date types and structures
- The structure of a smart contract
- Contract lifecycle
- Example: A basic smart contract
- Testing with Remix
- Deploying the contract
- Monitor the deployment with Etherscan
- Call the contract
- Kill/Un-deploy a contract

A practical session will follow where attendees will create, test deploy, call and kill a smart contract.

Module 5
Advanced Smart Contracts

- Using the Truffle framework
- Securing contracts
  - Common exploits
  - Common contract security patterns
  - Zeppelin SafeMath Library
- Advanced Data Structures
  - Arrays
  - Maps and Structs
- Deploying your own testnet with Ganache
- Testing with Mocha

Ethereum Developer Course

Module 6
Building Ethereum Distributed Application Apps

- Using the Truffle framework
- Introducing Web3.js
- Rendering contract data
- Using a form to get user input
- Using static assets
- Interfacing with distributed file system
    - IPFS
    - Swarm
- Decentralized P2P communication
    - Whisper/Orbit
    - Sending/receiving messages
- Oracles
    - Types of Oracles
    - Some useful existing Oracles
    - Interfacing with Oracles

Module 7
Advanced and Multi Page Front-ends

- Layouts, buttons and CSS
- Routing
- Validation and error handling
- Spinners

Module 8
Enterprise Scale Dapps Infrastructure and Architecture

- Architecting Ethereum projects
- Solium – standardizing style and security practices
- Dapps DevOps
- Unit testing
- Regression testing
- Automating the development pipeline
- Monitoring a live DApp

Legal and Regulatory Implications of Cryptocurrency and Blockchain Technology Course

This course is aimed at both legal and non-legal attendees at a beginner level and introduces the attendees to a wide range of potential legal issues when dealing with bitcoin, cryptocurrencies and blockchain technology.

The course analyses existing trends and approaches by governments and industry across jurisdictions, as well as analyses future use cases and potential legal issues and risks. Legal issues discussed range from liability, privacy, data security, contracts, consumer protection, financial regulation and tax. Other topics covered include regulating for disruption, ethereum, smart contracts, sandboxes, blockchainconsortiums and Initial Coin Offerings (ICOs).

WHO SHOULD ATTEND?

- Anyone who wants to understand the legal implications, regulation and compliance requirements of cryptocurrencies and blockchain technology
- Lawyers
- Compliance and risk offers
- Regulators

COURSE OUTCOME:

The outcome of this course is to provide attendees with enough knowledge to be able to ask the right legal and regulatory questions and identify the relevant risks when dealing with blockchain technology as well as with cryptocurrencies.

Attendees will have a good understanding of the global regulatory trends and approaches by governments and various industries towards cryptocurrencies, Initial Coin Offerings (ICO's) and blockchain technology.

Attendees will have insight into what the risks are when dealing with this technology from an investment and legal perspective.

Legal Implications of Cryptocurrencies and Blockchain Course

Module 1
Introduction

- A short history of the development of cryptocurrencies and blockchain technology
- Overview of the latest developments in cryptocurrency and blockchain
- A quick introduction and recap of important terminologies and concepts that will be discussed during the course, for example, ICOs, smart contracts and mining

Module 2
Cryptocurrency Regulation: Part One

- Overview of the different approaches taken by regulators globally
- Discussion on the legal nature of cryptocurrencies (is it a currency, security or asset?) and issues surrounding use of cryptocurrencies
- Impact of regulation on Cryptocurrency, for example, is tax payable for income received in bitcoin?

Module 3
Cryptocurrency Regulation: Part Two

- What are ICOs?
- Discussion on the legal nature of ICOs and issues surrounding its use
- Overview of various risks surrounding Cryptocurrency and ICOs, including scams,hacking and extortion

Module 4
Smart Contracts

- What are smart contracts: are they smart and are they contracts?
- Are smart contracts legal and binding? Who is liable when something goes wrong?
- What are the use cases for smart contracts? Who creates smart contracts?

Module 5
Blockchain Applications

- What is blockchain or distributed ledger technology and why is it important?
- What are the use cases? We will discuss practical use cases, including SARB's Project Khokha
- What are the potential legal issues and risks associated with blockchain technology?

Module 6
Where to Next?

- What does a cryptocurrency and blockchain future look like?
- What are the barriers to adoption that need to be overcome?
- What does the industry need from regulators in order to move forward?

Cryptocurrency Trading for Beginners Course

The purpose of this course is to provide individuals with the foundational knowledge required to navigate the financial markets and as such will be suitable for the complete novice trader that wishes to engage with the world of Cryptocurrency trading.

Attendees will learn everything from basic trading terminology to how to actually place orders via a broker using a trading platform. A large part of the course will focus on the practical side of using a trading platform, understanding the different order types and how to execute those orders in real time in a simulated account. The course will provide a real strategy on arbitraging Cryptocurrency between different local and international exchanges.

WHO SHOULD ATTEND?

- Individuals who would like to start trading and arbitraging with cryptocurrencies such as bitcoin, in a highly effective way
- Individuals who do not have any or much understanding of how to trade already

COURSE OUTCOME:

The outcome of this course is to provide individuals with the foundational knowledge, tools and techniques to engage in highly effective Cryptocurrency trading and arbitraging on local and international Cryptocurrency exchanges.

Cryptocurrency Trading for Beginners Course

Module 1
Introduction to Online Trading

- Exploring the financial market
- Cryptocurrencies price potential from a technical point of view
- Trading terminology

Module 2
Market Participation

- Different trading styles
- Which trading style fits you best?

Module 3
Trading via a Broker

- Brokers that support cryptocurrencies
- Navigating a trading platform
- Understanding different order types
- Practical order execution in a simulated account

Module 4
Trading Directly on an Exchange

- Internation exchanges
- Creating a cryptocurrency wallet
- Securing your cryptocurrency
- How to buy and sell on an exchange

Module 5
Bonus Arbitrage Strategy

- Exchanges used to exploit price differences
- Explaining the process step by step
- Logging your strategy metrics

Module 6
Conclusion

- Question and Answer session
- Where to from here?

Blockchain and Insurance Innovation Course

This two day hands-on workshop is designed for insurance services professional, corporate executives, marketers, IT specialists, CEO's, senior strategists and entrepreneurs who wish to fully understand the practical applications of blockchain in the insurance industry to solve real business problems and how to reduce costs substantially by removing the need for middlemen, eliminating a lotof manual processing, increasing the speed of transactions and increasing business transparency.

WHO SHOULD ATTEND?

- Insurance professionalsbroadly
- C-Level Executives:
  - CEOs
  - CTOs
  - CIOs
  - COOs
  - CFOs
  - IT Managers Finance Managers
  - Compliance and RiskOfficers
  - Regulators

COURSE OUTCOME:

The outcome of this course is to provide attendees with a general overview of blockchain, cryptocurrencies and their application in the insurance sector.

Upon completion of the course attendees will have a firm grasp of the basic utilities of blockchain technology, their application in the insurance industry, latest innovations in the industry and the next steps to innovate their insurance products. Innovation in the insurance sector is happening at a rapid pace and blockchain technology has an important role to play.

Both entrepreneurs and insurance incumbents alike are using blockchain to automate insurance policies, reduce fraudulent claims and process secure data for their clients. In addition, many are creating new financial products resulting in new streams of business and revenue opportunities that were previously not possible.

Blockchain and Insurance Innovation Course

DAY 1: Module 1 Understanding Blockchain and Cryptocurrencies

The first part of the course **("Module 1")** will be dedicated to building a general understanding of the basic building blocks of blockchain technology and cryptocurrencies, and what makes them so transformative and disruptive across a number of industries.

This module is for individuals who are new to cryptocurrencies and blockchain technology. The outcome of this module is to provide individuals with a general overview of blockchain technology and cryptocurrencies. The module begins with brief overview of cryptocurrencies such as bitcoin, including its history, use cases and development since the creation of the Bitcoin Blockchain in 2009.

The module also covers the basic building blocks of blockchain technology – including:

(1) reducing payment costs with cryptocurrencies and payment channels;
(2) programmable transactions and smart contracts; and
(3) connecting devices and real-time world information (e.g. healthcare transactions, car motor health) to blockchain-based applications.

At the end of the module, attendees will be able to answer the following questions:

- What is a blockchain technology?
- How do I use a blockchain technology?
- What is bitcoin, cryptocurrencies and digital assets?
- What kind of use cases exist in the financial and Insurance industries?
- What's the future of blockchain and cryptocurrencies?

DAY 2: Module 2 Blockchain Application and Insurance Innovation

The second part of the course **("Module 2")** will focus specifically on the application of blockchain technology in the insurance sector. This module will work through pain points in the insurance industry and existing use cases for how blockchain technology can be used to innovate insurance products and services.

Most importantly, it will focus on equipping attendees with skills and knowledge required to hypothesis and then validates and execute on how blockchain technology can be utilized within theirorganizations.

The session will focus on equipping attendees with a step-by-step guide on how to create research and development within their insurance organizations in order to apply blockchain technology for a variety of use cases.

At the end of the module, attendees will be able to answer the following questions:

- A solid understanding of the basic utilities of blockchain technology, and their application in the insurance industry
- The ability to create research and development within your insurance organization in order to apply blockchain for a variety of u

The SynTechNX Blockchain Academy did a great job of presenting blockchain on Ethereum. I would recommend anyone interested to learn more about blockchain technology to attend any of their courses.

Nicholas T
Global Parnership

I have been impressed with their sector knowledge and their network of expertise. We held one workshop at The Peninsula Ballroom for some of our entrepreneurs and senior executives, which was well received and participants had positive feedback. We continue to work with SynTechNX on an ongoing basis and really value their collaboration.

Jimmy O
Strategic officer, ASEAN

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 SynTechNX Academy for putting the course together and delivering it with a very knowledgeable tutor.

James Y
IT Infrastructure head