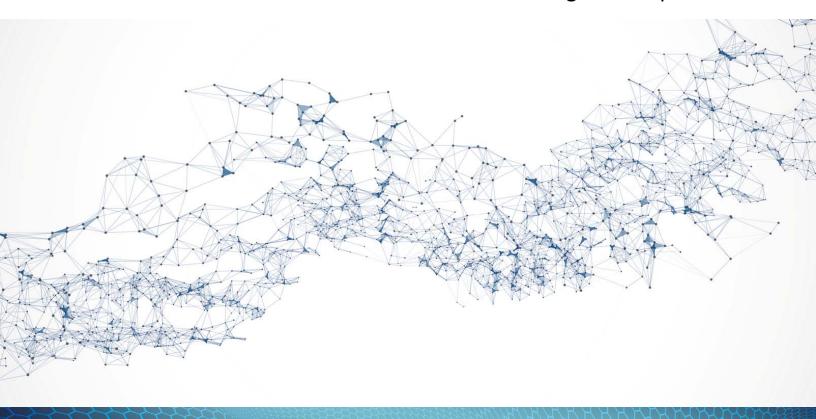
**2017 Program Outline** 

Online Training from CapitalWave Inc.



Capital Wave Inc.

Technology Enabled Learning <sup>™</sup>

# **CLOUD BASED TRAINING:**

Every organization seeks to insure that new graduates, new hires, and current employees add value to the business quickly and consistently. It has become ever more critical to onboard and train employees cost-effectively, as well as to ensure all staff are up-to-speed with new products, new techniques and changes in the marketplace.

The Blockchain Academy provides the latest market training delivered in a format that is the latest talked about solution by forward-looking firms such as Gartner, Cisco and Forrester. Our solution is video-based training deployed via the cloud, and supported by written content, quizzes, exams and trainer access. The highest rate of learning adoption currently is via video-delivery. Not only does it provide repeatable and flexible delivery, but users are better engaged, capable of accessing training from any device, and remain in a managed program. Video training is typically delivered for a fraction of the cost compared to traditional live-training formats.

Our *Technology Enabled Training* is available via any internet connected computer, tablet or smartphone. The entire catalog, as well as a customized group of specific programs, can be deployed across your entire company.

# For employees

- Participate in a scheduled program
- Integrate training with daily workflow
- Explore topics in all aspects of the Capital and Wealth Markets
- Increase your financial acumen and skills
- Research individual program to find answer to specific questions
- Enhance professional development

# For management

- Turn-key solution deployed via the cloud
- Promote both individual and group learning
- Provide employee performance support
- Support employee onboarding
- Simplify and facilitate transitioning staff
- Supplement and/or replace books
- Manage financial skills of your staff
- Reduce and/or eliminate logistic costs from direct training solutions

## Main features

- Expert Instructors
- Custom learning paths
- Downloadable resource material
- Online note taking
- Certificates of completion
- Entire catalog access
- Mobile device access
- Detailed reporting at group, course, and user level
- Privacy and security
- Content updates at no additional cost

# ONLINE VIDEO PROGRAMS

#### THE BLOCKCHAIN ACADEMY

Blockchain Foundations
Blockchain Intensive—Bitcoin
Blockchain Intensive—Financial Sector

#### **GLOBAL MARKETS ACADEMY**

Fundamentals of Global Markets
Equity Market Fundamentals
Fixed Income Fundamentals
Bond & Financial Maths
Fundamentals of Forwards and Futures
Fundamentals of Options
Fundamentals of Swaps and FRAs
Fundamentals of Credit Derivatives
Analyst & Associate Graduate Training

#### **INVESTMENT MANAGEMENT ACADEMY**

Investment Management Intensive Alternative Investments—Intensive Fundamentals of Commodities

#### **GLOBAL OPERATIONS ACADEMY**

Security Operation Concepts
Fundamentals of Banking Operations
Security Trade Lifecycle
Fundamentals of Corporate Actions
Risks in Securities Operations

# RISK & REGULATORY ACADEMY

Fundamentals of Risk Management Regulatory Supervision & Management Basel III: Regulatory Intensive

# PROGRAMS COMING SOON...

Wealth Management Intensive
Investment Banking Fundamentals
Fundamentals of Forex
Commodities & Energy Fundamentals
FRM & APRM Certification Training

#### **IMPLEMENTATION**

Via our DLE or your LMS
Integration & Authentication options
Allows for bulk user upload
Cloud Implementation
Accessible via computer, tablet and
smartphones



104 West 40th St, 4th Fl. NYC, NY 10018 1 Royal Exchange, London UK EC3V 3LL

www.CapitalWave.com www.GlobalMarketsAcademy.com www.InvestmentManagementAcademy.com www.TheBlockchainAcademy.com

# **BLOCKCHAIN FOUNDATIONS**

This course in an introduction to the world of bitcoin, blockchain and distributed ledgers. We'll cover the basics, look at how Bitcoin works under the hood, explore Bitcoin and blockchain's brief and fascinating history, and show you the practical usage of Bitcoin and blockchain technology. The aim of the course is to provide a solid foundation for those looking to gain a deeper understanding and learn how it will affect their business areas. With a firm focus but not entirely limited to the finance industry we will look at use cases that are already in the market and those that will come in the future.

## Module 1: Blockchain Basics 1

- Origins of Blockchain
- Disintermediation
- How Bitcoin Works
- Other Consensus Methods

#### **Module 2: Blockchain Basics**

- Public vs Private Blockchains
- Hybrids
- Permissioned vs Permissionless

## Module 3: Cryptography

- Terms and Definitions
- Hash Functions

# **Module 4: Blockchains Security**

- Blockchain Security a primer
- Consensus engines on Blockchains
- Decentralization of computing architectures

# Module 5: Accessing Utilities KU and TX and Wallets

- Public / Private Keys / Wallets
- Passphrase-Encrypted Wallets (AKA BIP38)
- Multisig

#### **Module 6: Blockchain Smart Contracts**

- Data
- Permissions
- Tokens
- Solidity

# Module 7: Blockchain Pros & Cons

- Speed, cost and latency
- Throughput
- Public vs Private Blockchains
- Open source vs proprietary

# Module 8: Current State of Blockchain

- Bitcoin Blockchain
- Ethereum / Eris / Tendermint / BigChainDB
- Hyperledger

# Module 9: Review of Public Blockchain apps

- InsurEth
- Augur
- Digix

## Module 10: Governments & Regulation

- Who regulates it?
- Currently regulatory landscape
- US, UK and EU government view

#### Module 11: Use case deep dive

- Blockchain in global financing
- Use of blockchain to create efficient interactions
- Blockchain used to resolve business interactions
- Central Banks use of Blockchain

# Module 12: DAO

- How does it work
- How was it funded
- What happened with the DAO attach?
- What are the ramifications of the DAO attack?

# **Module 13: Regulatory Reporting**

- What is regulatory reporting
- RegTech a deeper look
- Transaction reporting via the blockchain
- Simplify complex systems

# Module 14: Breakout Session

- Payments / Remittances
- Provenance
- Identity

# Module 15: - The Future of Blockchain

- The Future A vision statement
- Threat or opportunity?
- The future of Banking and Finance
- Blockchain applications in Finance
- Adoption of Blockchain by Central Banks
- The Distributed Autonomous Organization

# **ONLINE VIDEO PROGRAMS**

#### THE BLOCKCHAIN ACADEMY

Blockchain Foundations
Blockchain Intensive—Bitcoin
Blockchain Intensive—Financial Sector

#### GLOBAL MARKETS ACADEMY

Fundamentals of Global Markets
Equity Market Fundamentals
Fixed Income Fundamentals
Bond & Financial Maths
Fundamentals of Forwards and Futures
Fundamentals of Options
Fundamentals of Swaps and FRAs
Fundamentals of Credit Derivatives
Analyst & Associate Graduate Training

#### **INVESTMENT MANAGEMENT ACADEMY**

Investment Management Intensive Alternative Investments—Intensive Fundamentals of Commodities

#### **GLOBAL OPERATIONS ACADEMY**

Security Operation Concepts
Fundamentals of Banking Operations
Security Trade Lifecycle
Fundamentals of Corporate Actions
Risks in Securities Operations

#### RISK & REGULATORY ACADEMY

Fundamentals of Risk Management Regulatory Supervision & Management Basel III: Regulatory Intensive

#### PROGRAMS COMING SOON...

Wealth Management Intensive
Investment Banking Fundamentals
Fundamentals of Forex
Commodities & Energy Fundamentals
FRM & APRM Certification Training

#### **IMPLEMENTATION**

Via our DLE or your LMS
Integration & Authentication options
Allows for bulk user upload
Cloud Implementation
Accessible via computer, tablet and
smartphones



104 West 40th St, 4th FI. NYC, NY 10018 1 Royal Exchange, London UK EC3V 3LL www.CapitalWave.com www.GlobalMarketsAcademy.com www.InvestmentManagementAcademy.com www.TheBlockchainAcademy.com

# Call us for Enterprise pricing.

US: +1 (212) 658-0012 | EMEA: +44 (0) 203 714 9595 | email: sales@capitalwave.com  $$^{\circ}$$  Copyright 2016 CapitalWave Inc.

# BLOCKCHAIN INTENSIVE I—Bitcoin & Blockchain

This course in a deeper look at the concepts that have been previously covered in the foundations course. Look under the hood and really get to grips with how the mining works and the bitcoin world. Get a deep and thorough understanding of the concepts that underpin how the world of blockchain works. Look at use cases in detail, really understand how they work and why they work. Learn about new concepts like the DAO and why this is something that has huge implications for the world.

## **Module 1: Bitcoin Concepts**

- Origins of Blockchain
- Cryptography
- Software and networks
- Mining & Proof of Work

#### **Module 2: Technical Bitcoin Limitations**

- Proof of work
- Network and Hardware
- Transaction throughput, volumes and block size.

## **Module 3: Bitcoin Limitations**

- Mining and Incentivizing
- Merchant Acceptance
- Price volatility
- Mining costs

#### Module 4: From Blockchain V1 to Blockchain V2

- Ethereum
- Proof Stake and Authority
- Smart Contracts and Sidechains

# Module 5: Blockchain as the New Database

- Decentralized Consensus
- The blockchain and blockchain services
- Smart Contracts and Smart Property

#### Module 6: Blockchain V2 Use Cases

- Payments
- Colored Coins and Digital Assets
- Identity
- Smart Contacts, voting, land registry and Trade Finance

# Module 7: Preparing your firm for Blockchain

- Technology
- Private vs Public Blockchain
- Sidechains
- BaaS—Blockchain as a Service
- Decentralized applications and smart contracts
- Barriers to blockchain adoption
- Industry collaboration
- Creating a blockchain ecosystem

# Call us for Enterprise pricing.

US: +1 (212) 658-0012 | EMEA: +44 (0) 203 714 9595 | email: sales@capitalwave.com © Copyright 2016 CapitalWave Inc.

# **ONLINE VIDEO PROGRAMS**

#### THE BLOCKCHAIN ACADEMY

Blockchain Foundations
Blockchain Intensive—Bitcoin
Blockchain Intensive—Financial Sector

#### **GLOBAL MARKETS ACADEMY**

Fundamentals of Global Markets
Equity Market Fundamentals
Fixed Income Fundamentals
Bond & Financial Maths
Fundamentals of Forwards and Futures
Fundamentals of Options
Fundamentals of Swaps and FRAs
Fundamentals of Credit Derivatives
Analyst & Associate Graduate Training

#### **INVESTMENT MANAGEMENT ACADEMY**

Investment Management Intensive Alternative Investments—Intensive Fundamentals of Commodities

#### **GLOBAL OPERATIONS ACADEMY**

Security Operation Concepts
Fundamentals of Banking Operations
Security Trade Lifecycle
Fundamentals of Corporate Actions
Risks in Securities Operations

#### **RISK & REGULATORY ACADEMY**

Fundamentals of Risk Management Regulatory Supervision & Management Basel III: Regulatory Intensive

#### PROGRAMS COMING SOON...

Wealth Management Intensive
Investment Banking Fundamentals
Fundamentals of Forex
Commodities & Energy Fundamentals
FRM & APRM Certification Training

#### **IMPLEMENTATION**

Via our DLE or your LMS
Integration & Authentication options
Allows for bulk user upload
Cloud Implementation
Accessible via computer, tablet and
smartphones



1 Royal Exchange, London UK EC3V 3LL www.CapitalWave.com www.GlobalMarketsAcademy.com www.InvestmentManagementAcademy.com www.TheBlockchainAcademy.com

104 West 40th St, 4th Fl. NYC, NY 10018



# BLOCKCHAIN INTENSIVE II—The Financial Sector

This immersive course is designed individuals who understand the basics of digital currencies such as bitcoin and the blockchain technology, with a focus on adoption and use within the Financial Sector. Understanding FinTech and its impact and implementation of standards within the Financial Sector. This course delves deeper into the concepts covered in the Blockchain Foundation and Blockchain Intensive I courses.

#### Module 1: Introduction to FinTech

- FinTech overview and Landscape
- Blockchain Investments
- Banks and Blockchain
- Challenges

# **Module 2: Accounting and Compliance**

- Compliance and legal issues
- Cyptonite and Crypto-currency security standards
- Money Laundry, Accounting and Auditing

#### Module 3: Security with Blockchain

- Security Challenges
- Engines and Architecture
- Permissionless vs. Permissioned
- Addressing Privacy and Security

# Module 4: Regulation

- Overview of Blockchain Regulations
- Regulating the Blockchain
- Stifling Innovation and Resistance is Futile

# **Module 5: Operations**

- Standardization
- Security Transactions
- Asset Servicing
- Clients and Dealers
- Private Trading Companies
- Central Counterparty Clearing House CCP
- Custodians
- Barriers to adoptions
- Scalability, regulations and legislation
- Common standards and governance
- Operational risks
- Use cases

#### Module 6: Identity and KYC

- KYC, AML, CFT
- The future of digital identity
- Four KYC challenges
- Blockchain for KYC
- Remaining Questions
- Companies addressing identity and KYC

# **Module 7: Exchanges CCPs and CSDs**

- Disrupting Exchanges, CCPs and CSDs
- Euroclear
- DTCC
- CME Group
- NASDAQ

# **Module 8: Central Bank Implementations**

- Job of Central Banks is to worry
- Central Bank Digital Currency
- Adoption by Central Banks
- Emerging Economies
- Bank of England
- Bank of Canada

# Module 9: Preparing for Blockchain

- Evaluate the problem
- Barriers to blockchain adoption
- Evaluate the Technology
- Public vs Private
- Smart Contracts
- Pegging Sidechains
- Consortiums and Collaboration

# ONLINE VIDEO PROGRAMS

#### THE BLOCKCHAIN ACADEMY

Blockchain Foundations
Blockchain Intensive—Bitcoin
Blockchain Intensive—Financial Sector

#### **GLOBAL MARKETS ACADEMY**

Fundamentals of Global Markets
Equity Market Fundamentals
Fixed Income Fundamentals
Bond & Financial Maths
Fundamentals of Forwards and Futures
Fundamentals of Options
Fundamentals of Swaps and FRAs
Fundamentals of Credit Derivatives
Analyst & Associate Graduate Training

#### **INVESTMENT MANAGEMENT ACADEMY**

Investment Management Intensive Alternative Investments—Intensive Fundamentals of Commodities

#### **GLOBAL OPERATIONS ACADEMY**

Security Operation Concepts
Fundamentals of Banking Operations
Security Trade Lifecycle
Fundamentals of Corporate Actions
Risks in Securities Operations

#### RISK & REGULATORY ACADEMY

Fundamentals of Risk Management Regulatory Supervision & Management Basel III: Regulatory Intensive

#### PROGRAMS COMING SOON...

Wealth Management Intensive
Investment Banking Fundamentals
Fundamentals of Forex
Commodities & Energy Fundamentals
FRM & APRM Certification Training

#### **IMPLEMENTATION**

Via our DLE or your LMS
Integration & Authentication options
Allows for bulk user upload
Cloud Implementation
Accessible via computer, tablet and
smartphones



104 West 40th St, 4th FI. NYC, NY 10018
1 Royal Exchange, London UK EC3V 3LL
www.CapitalWave.com
www.GlobalMarketsAcademy.com
www.InvestmentManagementAcademy.com
www.TheBlockchainAcademy.com



CapitalWave Inc. is a firm made of up industry professionals having a reputation for providing first-rate training and consultancy to institutions in the capital and wealth markets. CapitalWave offers instructors and programs who have extensive knowledge, experience and expertise in the areas of banking and finance.

Blended learning is the philosophy on which the company was founded. Our training methodology, integrating theory with practice using our own very powerful training tools, creates a uniquely exciting and effective learning environment. The result pays immediate dividends in the retention of newly-learned concepts and their practical application in the financial marketplace.

For further information, please contact:

# **Bryant Nielson, Director**

Bryant.nielson@CapitalWave.com

http://www.CapitalWave.com

Telephone: US + (212) 658-0012 UK + 44 (0) 20 3751 6250