



DLT
CERTIFICATE

Distributed Ledger Technology Professional Certification Programme

Thursday 16th May - Thursday 1st August 2019



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Introduction

Blockchain and Cryptocurrency have become an essential part of the Fintech field, gaining more and more traction in traditional finance. There are numerous Distributed Ledger Technology (DLT) startups, job openings and internal corporate projects.

This course has been designed to empower individuals who work in or are seeking a career in Distributed Ledger Technology, Blockchain or Cryptocurrency. The DLT is a career-enhancing professional qualification, that can be taken worldwide.

The qualification comprising of 3 modules:

- 12 lecture weeks
- 3 assignment projects
- A practical final project
- Final sit down 3 hour examination using our global network of examination centres.

All seminars are LIVE. We have brought best industry experts to share their experience and insight during LIVE conversations. Founders, entrepreneurs and C-level executives of real companies will share their know-how during LIVE lectures on DLT technology stack.

Benefits

After Completing the DLT Certificate, you will have the knowledge to:

Run DLT-based projects in your company:

- You will be equipped with knowledge of DLT technology architecture, latest trends in the field, main players and understanding of domain-specific risks.

Perform due diligence of potential partners and service providers:

- You will be equipped with detailed framework on how to evaluate a company and understand risks and strengths associated with it.

Stay up to date with industry leaders:

- You are invited to live interview sessions with founders, entrepreneurs and C-level executives of real companies to share their know-how during LIVE lectures on the DLT technology stack.
- You can join free of charge any interview session during any of subsequent courses that will take place after yours.

Do your own investment research:

- You will understand price mechanics and trends, know main sources of credible information and will be proficient to form your own view about the industry.

Start Date: Thursday 16th May 2019

FORMAT:

- 12 lecture weeks live in London or globally online.
- Final Project, 3 assignments and 3 hour Examination.

TOTAL LEARNING HOURS:

8-10 learning hours per week. 2-3 hour lectures.

LOCATION: Central London / Streamed live globally.

Internet-based student-faculty forum and seminars. This is a truly global qualification with weekly world-wide interaction via WebEx during lectures.

All lectures will be recorded and stored in the student's personalised portal.

SUPER EARLY BIRD DISCOUNT:

25% Discount until 22nd February 2019

EARLY BIRD DISCOUNT:

15% Discount until 8th March 2019

VOLUME DISCOUNT:

If 2 or more people from your institution wish to take The DLT Certificate please contact us

REGIONAL OFFERS:

Get in touch for offers in your geographic region

Structure

This course will help finance professionals understand Distributed Ledger Technology (DLT) domain area main concepts, trends and get prepared for:

- **DLT-based projects and products**
- **Relevant job opportunities**
- **DLT domain-specific investment research**
- **Upskill your employees**

Weeks 1-4: Distributed Ledger Architecture

This module is focused on building blocks that form the basis of Distributed Ledger Technology. Cryptography, consensus mechanisms, evolution of technological ideas from Bitcoin to Ethereum and further. Our goal here is to come up with framework of the Blockchain Application Stack and understand the structure and internal value of every layer within this structure.

- Introduction to cryptography
- Decentralization and smart contracts
- Network architecture
- Smart Contracts and Decentralised applications
- Guest lecture:
 - Amrit Kumar is Co-Founder at Zilliqa - next generation high throughput platform. Together we will discuss the evolution of DLT domain, what comes beyond blockchain 2.0 and the concept of sharding.
 - Massimo Morini, Head of Interest Rate and Credit models at Banca IMI, will share his insights on Smart Contract use-cases and architecture.
 - More speakers to be confirmed
- Home assignment: white paper analysis
- Home assignment review seminar

Weeks 5-8: DLT-based projects business models review and classification

As crypto networks evolve, they are likely to provide strong incentives to unlock new business and create open services in many areas dominated by closed ones today. Open services powered by crypto networks will present unprecedented opportunity for a new generation of developers and entrepreneurs to innovate. Our goal here is to map Blockchain Application Stack we've covered in MODULE 1 to real-life companies and evaluate their business-models.

- DLT domain layered architecture concept
- Distributed applications development and protocol layer
- DLT business models that work and that don't work
- Market dynamics as a factor triggering business model success
- Guest lecture:
 - On Yavin, Founder and CEO at Cointelligence, entrepreneur and investor, will share his experience to create winning strategies for ICOs/STOs, crypto and blockchain companies
 - More speakers to be confirmed
- Home assignment due-diligence for a chosen project
- Home assignment review seminar

Weeks 9-12: DLT and Fintech regulation

Even though there is uncertainty in the current regulatory landscape, our objective is to cover best legal practices of DLT business in different jurisdictions, research history of DLT-projects regulation and understand what the right legal framework for different use-cases and businesses could be. We will analyse various regulatory examples and use cases here.

- Fintech policy overview (UK, US, EU, Malta)
- ICO and STO legal practices
- Asset tokenization legal practices
- Cryptocurrency Regulation and Taxation
- Guest lecture:
 - Greg Klumov, CEO at STASIS, the first tokenization platform with compliant institutional-grade infrastructure. Greg will share valuable experience into current state of regulatory practices in UK, US, Malta and other jurisdictions.
 - More speakers to be confirmed
- Home assignment: white paper analysis for every student
- Home assignment review seminar

Weeks 11-15: DLT and Fintech Regulation

- Fintech policy overview (US, UK, EU, Malta)
- Cryptocurrency regulation (US, UK, EU, Malta)
- Cryptocurrency Taxation (US, UK, EU, Malta)
- Guest lecture: To be confirmed
- Home assignment: DLT use-case idea research and pitch
- Home assignment review seminar

Final project:

- Write a white-paper or business plan for a new DLT project or automation of a business process within an existing business.
- Final project review seminar

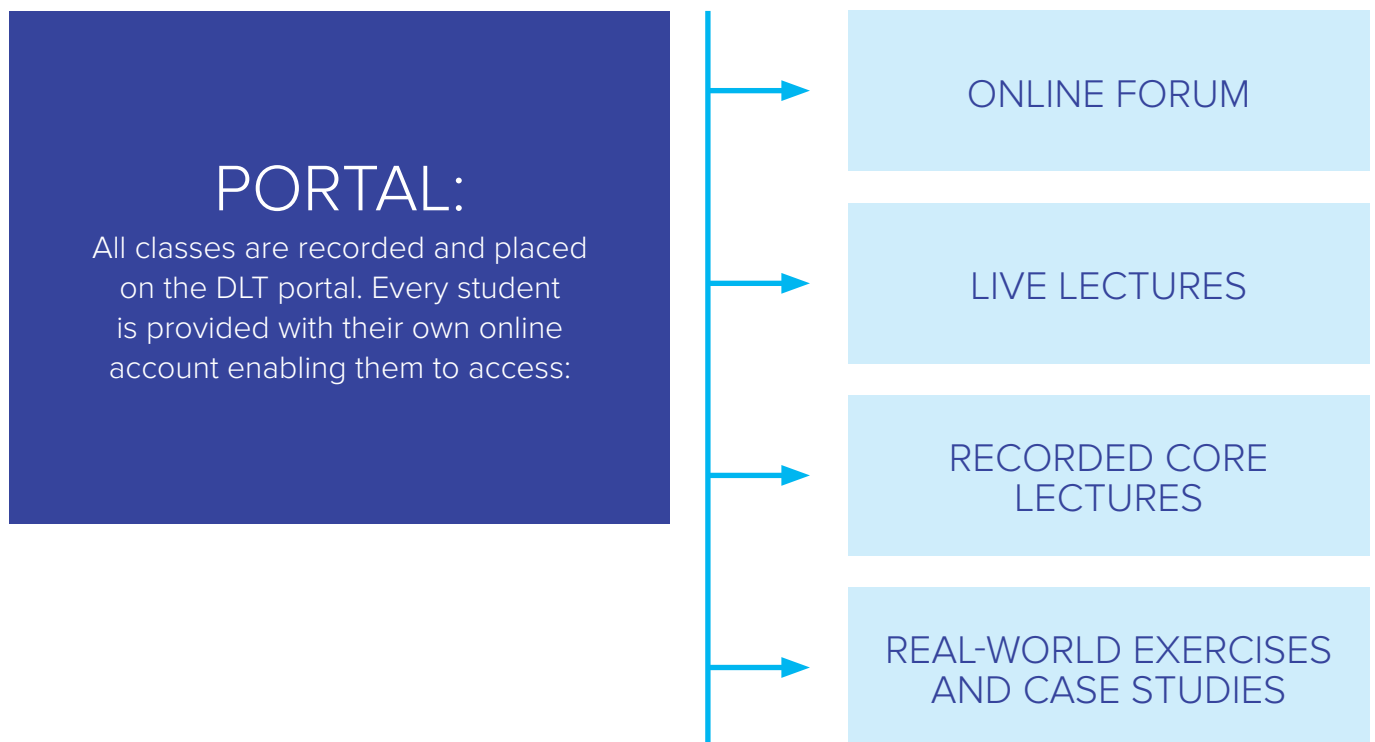
Qualification Examination

REGISTER ONLINE >

www.wbstraining.com/

Programme Delivery

The DLT is at the forefront of interactive online learning, which enables students from anywhere in the world to enrol on the programme. We offer a high quality and comprehensive learning portal giving 24-hour access to all the lectures and study materials.



Student profiles – Professionals working in the following fields:

Founders, entrepreneurs

Project Managers and Business Analysts

Blockchain

Cryptocurrency

Distributed Ledger Technology(DLT)

MODULE ONE: DISTRIBUTED LEDGER ARCHITECTURE

WEEK 1: INTRODUCTION TO CRYPTOGRAPHY Thursday 16th May / 18.00 - 20.00

- **Intro** About the course / Schedule, rules and materials
- **Introduction to Cryptography** Hash Functions / Hash Pointers and data structure / Digital Signature
- **Simple Cryptocurrency** Centralized currency model / Decentralized currency model
- **Bitcoin Consensus Mechanism**
- **Bitcoin Mining** Incentives and Proof of work / Hash puzzles
- **Further development** Segregated Witness / Lightning network / Sharding / State channels / Block size

Lecturers:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 2: DECENTRALIZATION AND SMART CONTRACTS Thursday 23rd May / 18.00 - 20.00

- **Consensus mechanisms** Proof of Work / Proof of Stake / Hybrid models
- **Network governance structures** Community decision making / Code ownership / Development incentives / Validation incentives
- **Previous lecture recap**
- **Possible attacks** Double spend / 51%
- **Bitcoin Economy**
- **Bitcoin internal scripting mechanism** Turing completeness / Ethereum / Ethereum Virtual Machine
- **Smart Contracts**
- **Decentralized Applications**

Lecturers:

- Massimo Morini (Head of Interest Rate and Credit Models, Banca IMI)
 - Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 3: GUEST LECTURE Thursday 30th May / 18.00 - 20.00

- **Previous lecture recap**

Lecturers:

- Amrit Kumar is Co-founder and technical lead at Zilliqa - next generation high throughput platform. Together we will discuss the evolution of DLT domain, what comes beyond blockchain 2.0 and the concept of sharding.
 - Massimo Morini, Head of Interest Rate and Credit models at Banca IMI, will share his experience on Smart Contracts use-cases and architecture.
 - More speakers to be confirmed
-

WEEK 4: BLOCKCHAIN ARCHITECTURE Thursday 6th June / 18.00 - 20.00

- **Smart Contracts** VM / Dev Tools / Development structure
- **Decentralized Applications** Tools / Security / Scalability
- **Alternative DLT projects** Hashgraphs / DAG (NANO) / Agent-centric approach(Holochain)
- **Home Assignment** White paper analysis for every student

Lecturers:

- Amrit Kumar (Cofounder and Head of Research, Zilliqa)
- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)

MODULE TWO: DLT DOMAIN PROJECTS REVIEW, RESEARCH AND CLASSIFICATION

WEEK 5: DLT DOMAIN PROJECTS OVERVIEW AND RESEARCH

Thursday 13th June / 18.00 - 20.00

- **Previous module recap**
- **Module intro**
- **Internet of value**
- **Types of tokens** Currency token / Utility token / Security token
- **Project classification** Currency / Platform / Marketplace / Private Blockchains / Scalability/Interoperability / Stablecoin
- **Project examples from every class** Bitcoin/Litecoin/Monero / Ethereum/Zilliqa/EOS / 0x/Loopring / Hyperledger/Ripple / COSMOS/Interledger/Lightning Network / ether/Stasis / Telegram Token TON

Lecturer:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 6: DLT PROJECTS BUSINESS MODELS Thursday 20th June / 18.00 - 20.00

- **Previous lecture recap:**
- **Public blockchain**
- **Private blockchain**
- **Blockchain as a Service**
- **Marketplaces** Centralized / Decentralized / Hybrid
- **Distributed Ledger as an enterprise solution** Finance / Trade / Logistics / Property / LegalTech / GovTech

Lecturer:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 7: GUEST LECTURE Thursday 27th June / 18.00 - 20.00

- **Blockchain Business Use-Cases and Business Strategies**

Lecturers:

- On Yavin, Founder and CEO at Cointelligence, entrepreneur and investor, will share his experience to create winning strategies for ICOs/STOs, crypto and blockchain companies.
 - More speakers to be confirmed
-

WEEK 8: MARKET DYNAMICS Thursday 4th July / 18.00 - 20.00

- **Previous lecture recap**
- **Bitcoin as a starting point**
- **Financial bubbles review & explanation**
- **ICO market dynamics**
- **Other indicators** Bitcoin dominance index / Relative asset valuations / Capital circulation / DCF model in crypto

Lecturer:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)

MODULE THREE: DLT AND FINTECH REGULATION

WEEK 9: FINTECH POLICY OVERVIEW (US, UK, EU, MALTA) Thursday 11th July / 18.00 - 20.00

- Previous module recap
- Module intro
- FinTech definition
- Brief history of FinTech
- Regulatory challenges faced by Fintech companies
- Regulatory infrastructure of different jurisdictions

Lecturer:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 10: CRYPTOCURRENCY REGULATION Thursday 18th July / 18.00 - 20.00

- Previous lecture recap
- Cryptocurrency as money
- Cryptocurrency as commodity
- Cryptocurrency as property
- ICO Regulation Howey Test / DAO example

Lecturer:

- Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

WEEK 11: GUEST LECTURE Thursday 25th July / 18.00 - 20.00

Guest lecturers:

- Greg Klumov, CEO at STASIS, the first tokenization platform with compliant institutional-grade infrastructure. Greg will share valuable experience into current state of regulatory practices in UK, US, Malta and other jurisdictions.
 - More speakers to be confirmed
-

WEEK 12: FINAL PROJECT REVIEW Thursday 1st August / 18.00 - 20.00

Lecturers:

- Gregory Klumov (CEO & Founder, STASIS)
 - Dmytro Pershyn (Head of Faculty: DLT Certificate & Founder of Quantlife LTD)
-

FINAL EXAMINATION Thursday 25th July

Thursday 25th July: Distributed Ledger Technology in Finance Certificate (DLT) Examination

- The final examination is taken globally, via our network of test centres.

Faculty



Dmytro Pershyn *CEO & Founder, Quantlife.Tech*

Dmytro is a CEO at Quantlife.tech, IT Consulting company that focuses on building complex IT solutions for startups and corporate innovators. With a team of top-tier software engineers, Dmytro has delivered numerous projects in FinTech and DLT fields including Exchanges, Asset Tokenization, protocol layer development etc. In DLT space he has come all the way from early-stage startup consulting to building enterprise level solutions. With strong background in multi-asset trading and Financial Markets he is keen to share his expertise about recent market developments and tech trends. www.linkedin.com/in/pershyndmytro/



Gregory Klumov *CEO & Founder, STASIS*

Greg is a CEO of STASIS, the first tokenization platform with compliant institutional-grade infrastructure, three-stream verification process and a wide network of licensed service partners. Greg has been an advisor to Maltese and Kazakh government task forces and his expertise was vital to the successful implementation of their recent blockchain-friendly legislative initiatives



Massimo Morini *Head of Interest Rate and Credit Models, Banca IMI*

Massimo Morini is also Coordinator of Model Research. Massimo is Professor at Bocconi University and MSc Director at Milan Polytechnic, and he was Research Fellow at Cass Business School, London. He has published papers in journals including Risk Magazine, Mathematical Finance, and the Journal of Derivatives, and is the author of “*Understanding and Managing Model Risk: A Practical Guide for Quants, Traders and Validators*” and other books on credit, funding and interest rate modelling. Massimo holds a PhD in Mathematics.



Amrit Kumar *Cofounder and Head of Research, Zilliqa*

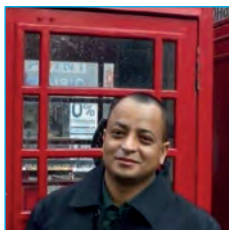
Amrit is the Head of Research for Zilliqa. He holds a PhD from Université Grenoble-Alpes, France and was hosted at Inria’s Grenoble center. Prior to his PhD, he obtained an Engineer’s diploma from Ecole Polytechnique, France, where he studied Computer Science and Mathematics. His research interests broadly span security, privacy and applied cryptography.



On Yavin *Founder and CEO, Cointelligence*

On Yavin is the founder and CEO at Cointelligence, a company that conducts data research and analysis for the crypto economy. On is an experienced serial entrepreneur and angel investor with more than 20 years experience in tech industry. On uses his deep, hands-on experience to create winning strategies for ICOs/STOs, blockchain companies. On has a law degree (LLB) and is also a certified Advocate by the Israeli Bar Association.

Faculty



Juarez Barbosa *Principal Developer Advocate / Blockchain Evangelist for Oracle EMEA*

Juarez is an expert in Cloud Computing, Containers and Kubernetes, Blockchain, the Java language and its platforms (Java SE, EE, Embedded), JVMs - Java Virtual Machines, Application Development, Software / Systems / Cloud Architecture and Mobile Platforms. He has acquired solid knowledge and experience over the last 23 years by working as Technical Evangelist, Cloud and DevOps Architect, Tech Community Manager, Software Architect, Software Engineer and Technical Lead being part of global, distributed teams at several big technology corporations.



Alireza Siadat

Alireza is an associate in Simmons & Simmons Financial Services group in Frankfurt and in the cross-border Blockchain working group. He is counselling banks, payment and financial service providers on compliance and risk management pre, as well as, post establishment of their regulated business. He's also an expert on crypto assets and the regulation of the blockchain and the distributed ledger technology. He is a member of the Blockchain Bundesverband e.V. (Working Group Finance) - Germany's leading crypto assets association – and founding member of thinkBLOCKtank A.S.b.l. In Germany, Alireza is the firm's go-to expert on crypto and



R3 (R3 LLC)

R3 (R3 LLC) is a distributed ledger technology company. It leads a consortium of more than 200 firms in research and development of distributed ledger usage in the financial system and other areas of commerce. It is headquartered in New York City. It was founded in 2014 by David E Rutter.

FAQ

Should I attend the programme?

DLT is a practitioner-orientated professional qualification that will enhance the short-term and long-term career prospects of anyone working in the following fields: Distributed Ledger Technology, Blockchain Cryptocurrency.

When will the DLT commence?

The certificate starts on Thursday 16th May 2019.

How long is the course?

The examined part of the course takes place over 3 months, with the examination taking place at the end of the course.

What is the early bird structure?

There is a 25% Super Early Bird discount until 22nd February 2019 and a 15% early bird discount until 8th March 2019.

Can I defer my Distributed Ledger Technology in Finance Certificate educational learning?

At any stage during the DLT you may defer your education until the next cohort. The cohort runs three times per annum (every January, April and September).

Where do I attend the course?

The course will take place in central London with weekly lectures at 18.00 each Thursday for 2- 3 hours.

How do I access the live global streaming lectures?

The live streaming will be available on Cisco WebEx, you will be given weekly login access details.

Email: neil@wbstraining.com

What happens if I fail the DLT?

You will have one chance to retake the final examination.

What happens if I miss a lecture week?

All the lectures are filmed and are available for you in your DLT online member's area for the duration of the course.

What is the cost of the DLT?

The certificate standard rate is £950.00

Can I stagger my DLT payments?

Yes The DLT offers flexible payment options where candidates can pay for the course by instalments.

Option 1:

- Pay in full on Registration

Option 2:

- Full course: Pay 50% on registration and 50% in week 11

Option 3:

- Full course: Pay £500 on registration, 50% of remaining balance at week 6 and the final 50% in week 12

How do I register for The DLT?

Complete the form opposite or alternatively, register online at:

www.wbstraining.com/events/distributed-ledger-technology-in-finance-certificate-dlt/booking/

What happens if I am unable to complete the course in four months?

It is possible for students to defer completion of the DLT to the next cohort at no extra charge.

Registration Form



Start date: Thursday 16th May 2019

Regular Course Fee

Course Fee: £950.00 + UK VAT

20% VAT is chargeable for residents in the UK and EU

Early Bird Discount

25% Discount until 22nd Feb 2019

15% Discount until 8th March 2019

Discount code

VOLUME DISCOUNT: If 2 or more people from your institution wish to take the DLT course please contact us.

To register, please fax or scan and email the completed booking form to:

E-mail: neil@wbstraining.com

FLEXIBLE PAYMENT OPTIONS:

Option 1:

- Pay in full on Registration

Option 2:

- Full course: Pay 50% on registration and 50% in week 11

Option 3:

- Full course: Pay £500 on registration, 50% of remaining balance at week 6 and the final 50% in week 12

DELEGATE DETAILS
NAME:
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POSTCODE:
TELEPHONE:
E-MAIL:
NATIONALITY:
DATE:
SIGNATURE:

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powered by The Quants Hub

E-mail: neil@wbstraining.com / Tel: +44 (0) 1273 201 352

The logo consists of a dark blue circle containing the text 'DLT' in large, bold, white letters, with 'CERTIFICATE' in smaller, white, all-caps letters below it.

DLT
CERTIFICATE

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