



IHASHING ACADEMY

TQUK Diploma in Blockchain Technology (Level 5)



Overview

Medium of Instruction	English / Cantonese
Mode of Instruction	Face-to-face / Live online
Course Dates	Sep 25 to Dec 18, 2024 Every Wed, Fri, and Sat (Except public holidays)
Time & Venue	19:00-22:00 at Kowloon area
Course Duration	90 Guided Learning Hours; 120 Total Qualifications Time Hours; intensive training programme & practical project
Tuition Fee	HKD 58,000 Early Bird Discount: HKD 56,000 10% discount for 2 trainees enrolling together 20% discount for 3 trainees enrolling together *Please indicate this request on the enrolment form Course fee can be paid in 3 installments *Please indicate this request on the enrolment form
Admission	1. Fill out the enrolment form 2. Pay on the website *If applying for a discounted price or installment payment, please indicate the request in the 'Remarks' section of the enrolment form. You will be contacted to confirm and send the payment method for the discounted price.
Enquiry	iacademy@ihashing.hk
Website	https://ihashing.hk

Introduction



This programme will equip you with practical, cutting-edge blockchain technology with FutureSkills, preparing you for a successful career in any rapidly evolving field.

Are you tired of traditional courses that feel outdated?

Are you looking to learn something truly useful and practical?

Traditional School vs. FutureSkills Academy	
Theory overload <i>X</i>	Practical application <i>✓</i>
Single subject focus <i>X</i>	Cross-disciplinary integration <i>✓</i>
Fixed mindset <i>X</i>	Innovative thinking <i>✓</i>
Outdated knowledge <i>X</i>	Cutting-edge technology <i>✓</i>

Why FutureSkills?

FutureSkills is a forward-thinking, technology-oriented, interdisciplinary set of practical skills. It cultivates both hard and soft skills through flexible learning methods, emphasizing continuous learning and industry collaboration to meet the demands of the rapidly evolving future workplace.

- **Innovation-driven:** Solve real-world problems, not just theoretical exercises
- **Cross-industry application:** Blockchain x Any Industry, seamless integration
- **Future-focused:** Develop adaptability for rapid changes

Course Features

- **Immersive learning:** Hands-on experience in **ESG-compatible Green Blockchain** project development (Signum Network), apply as you learn
- **Innovation workshops:** Spark creativity, cultivate design thinking
- **Industry mentors:** First-hand experience sharing, aligned with market needs
- **Flexible learning:** Attend classes after work/ class, ~120 hours of intensive training

Course Highlights



Comprehensive, Practical & Intensive Curriculum:

- Blockchain fundamentals and advanced web3 concepts
- Cryptography and consensus mechanisms
- Smart contract development
- Decentralized application (DApp) creation
- Blockchain for business and enterprise solutions
- Capstone project and examination

Hands-on Projects:

- Build your own blockchain token & NFT from scratch
- Develop and deploy smart contracts
- Create a functional DApp project
- Implement a real-world blockchain solution

Industry-Relevant Skills:

- Taught by industry experts
- Solidity & JS programming
- Web3.js & SIGNUM.JS integration
- Blockchain security best practices
- Tokenomics and cryptocurrency economics

Cutting-Edge Tools and Platforms:

- IPFS for decentralized storage
- Popular blockchain explorer and wallet interfaces

FutureSkills Focus:

- Critical thinking and problem-solving in blockchain contexts
- Blockchain project management
- Ethical considerations and governance in blockchain
- Interdisciplinary applications of blockchain technology

Career Development:

- Blockchain job market insights
- Portfolio building guidance
- Interview preparation for blockchain roles

Global Recognition:

- TQUK, SIGNUM Network & SIGDAO Foundation endorsed
- Enhances opportunities for overseas study and employment (UK, Australia, Canada)
- Aligned with international blockchain standards

Continuous Learning:

- Access to updated course materials post-graduation
- Invitation to alumni events and networking opportunities

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Course Outline

Course Fee: HKD 58,000
After Grants: HKD 29,000

Unit	Unit Content
<p>Unit 1: Introduction to Blockchain</p> <p>Assessment Methodology: Exam & PE</p>	<ul style="list-style-type: none"> • Overview of blockchain technology • History and evolution of blockchain • Blockchain network architecture • Blockchain consensus mechanisms (POW, POS, POC+) • Types of blockchains (public, private, consortium) <ul style="list-style-type: none"> • 1.1 Create your first paper wallet • Create your first Cryptocurrency Paper Wallet & Gift Card • 1.2 Correct your blockchain, Web3 & crypto perception • What is Blockchain, Web3 • Private Vs Public Blockchain • Blockchain, Web3 Ecosystem • Why Blockchain Network, Web3 is Secure • What are Smart Contracts & DApp
<p>Unit 2: Cryptography and Security in Blockchain</p> <p>Assessment Methodology: Exam</p>	<ul style="list-style-type: none"> • Cryptography • Hash functions and digital signatures • Public and private key cryptography • Smart contract security • Common blockchain security threats and attacks • Mitigating security risks in blockchain <ul style="list-style-type: none"> • 2.1 Bitcoin is not currency but asset • Bitcoin & Blockchain, Web3 Relationship • Coin vs Token vs NFT, RAW • How Cryptocurrency works • 2.2 Sustainable blockchain • What is Mining & Consensus Algo? • POW vs POS vs POC+ • Blockchain Layer2 Solutions & setup • 2.3 HODL Safe and DEX • Types of Cryptocurrency Wallets • Centralized & DeCentralized Exchanges • Attacks: How Crypto Can Be Hacked • Risk Management & DeFi, Gamefi, Social-fi

<p>Unit 3: Applications of Signum Network</p> <p>Assessment Methodology: Exam & PE</p>	<ul style="list-style-type: none"> • Signum Network • Signum SDK - SignumJS & SmartJ • Writing and deploying smart contracts on Signum Network • Decentralized Application (DApp) development on Signum Network • Interacting with smart contracts using SmartJ 	<ul style="list-style-type: none"> • 3.1 Blockchain, Web3 Technology Stacks • Web3 DApp & Frontend framework • Angular, React & NextJS • Frontend builder • Blockchain, Web3 Platforms • Ethereum & Polygon & Signum • Smart contract programming • Solidity & Remix IDE & Truffle dependency • SignumJS - SDK in Typescript • SmartJ - Smart contract platform in Java • Create first smart contracts & token with SignumJS & SmartJ
<p>Unit 4: Understand the InterPlanetary File System for Distributed Storage</p> <p>Assessment Methodology: Exam & PE</p>	<ul style="list-style-type: none"> • InterPlanetary File System (IPFS) • IPFS architecture and components • IPFS file system and data storage • Integrating IPFS with Signum Network (Pinata) • Distributed storage and data privacy in blockchain 	<ul style="list-style-type: none"> • 4.1 Blockchain, Web3 Technology Stacks (continued) • Distributed Storage Platforms (IPFS) - Pinata - working with IPFS gateway URLs • 4.2 Build NFT, RWA Collectibles & DApp Project by iHOST Web3 builder • Interact IPFS with Pinata
<p>Unit 5: Implementation for Smart Contract Development</p> <p>Assessment Methodology: Exam</p>	<ul style="list-style-type: none"> • Overview of smart contract development best practices • Common vulnerabilities in smart contracts • Security measures to secure smart contracts • Optimizing smart contracts for gas usage • Designing smart contracts for upgradability and modularity 	<p>5.1 Build NFT, RWA Collectibles & DApp Project by iHOST Web3 builder (continued)</p> <ul style="list-style-type: none"> • Deploy Smart Contract on Signum Network • List NFTs, RWAs on Signumart Marketplace • Build DApp Project & List on SIGDAO DApp Store!

*Course content will be regularly updated to reflect current industry trends and real-world developments

<p>Unit 6: Blockchain Scalability and Performance</p> <p>Assessment Methodology: Exam & PE</p>	<ul style="list-style-type: none"> • Blockchain scalability issues and solutions • Signum Network's scalability solutions • Sharding in Signum Network • Signum Network's performance benchmarks • Building high-performance DApps on Signum Network 	<ul style="list-style-type: none"> • 6.1 Hands on setup validator, nodes & NFT, RWA • 6.2 Blockchain, Web3 Digital Transformation for SME • Benefits of using Blockchain Tech • Adopt Blockchain, Web3 to your business • Tokenize & Create NFT, RWA for Biz
<p>Unit 7: Blockchain Governance and Regulation</p> <p>Assessment Methodology: Exam</p>	<ul style="list-style-type: none"> • Governance models in blockchain • Regulatory landscape and compliance in blockchain • Legal implications of blockchain technology • Decentralized autonomous organizations (DAOs) • Cryptocurrency taxation and reporting 	<ul style="list-style-type: none"> • 7.1 Blockchain, Web3 resources & identify scam project • Blockchain Tools and Platforms • 7.2 Blockchain, Web3 Project Anti-mediaframing Analysis • Blockchain Project Valuation by FCAS • Predicting market price by market cap
<p>Unit 8: Impact of Blockchain Technology</p> <p>Assessment Methodology: Exam</p>	<ul style="list-style-type: none"> • Current and emerging impacts of blockchain across industries • Transformative blockchain applications beyond cryptocurrency • Societal changes driven by blockchain technology • Economic and social implications of blockchain adoption • Ethical considerations and challenges in blockchain implementation 	<p>8.1 What is NFT, RWA? Not just Art form!</p> <ul style="list-style-type: none"> • Technical definitions of NFT and RWA • Token protocol (ERC20, ERC721 & ERC1155) • Web3 & DAO Business Model • NFT, RWA marketplace (Signumart, Opensea & Magic Eden) • NFT, RWA assets in Metaverse

- **8.2 Business Process Automation System Tools (MAKE.COM)**
- **Development of Open API ecosystems**
- **Introduction and application of No-Code Tools**
- **Introduction and application of API connection software (MAKE.COM)**
- **Integration of daily operational processes through API automation**
- **50 case studies of daily operational process automation**
- **Hands-on practical sessions**
- **8.3 Developing Blockchain Web3 DApp with Open API Tools**
- **In-depth introduction and connection of Open API tools**
- **Development and automation of Headless Vercel CMS**
- **SEO essentials, keyword optimization, Growth Hacking**
- **Basic application of Google/Matomo Analytics**
- **Configuration and connection of Payment gateways**
- **Blockchain wallet application and Web3.js & SIGNUM.JS integration**
- **Hands-on practical sessions**
- **8.4 Establishing Automated AI Agent**
- **Advanced Open API system integration**
- **Application examples**
- **Establishing automated lead generation and sales-oriented processes**
- **Process design and configuration**
- **Integration of AI Agent with Web3 DApp systems**
- **Hands-on practical sessions**

Key Takeaway



- Insight & Truth of Blockchain, Web3 DApp
- Tech Stacks of blockchain, Web3 project
- Build own NFT, RWA collections & DApp project on green SIGNUM Network
- Develop, Integrate, Deploy smart contract & Web3 project on green SIGNUM Network
- Master 50 real-world examples of daily operational process automation, develop and integrate API Integration Tools - MAKE.COM, expand and transform existing traditional business models
- Apply Open API tools to automate and develop Blockchain Web3 DApp to upgrade operational processes
- Establish automated AI Agent integrated with various systems, operating 24/7 to increase business profitability, reduce labor costs, and optimize customer experience
- Automate daily business operations such as connecting website appointment forms to CRM systems, automatic document storage management, and automated marketing campaigns to potential customers
- “Learn by doing” approach by creating personalized NFT certificates

Bonus Material

- Meet Global Talent Nominee in blockchain, Fintech & access web3 sigdao community
- Granted SIGDAO VIP Pass for dApp project to get listed, voted & funded without pain.
- NFT Certificate, TQUK, SIGNUM & SIGDAO Foundation endorsed

Award



Upon successful completion of the course and passing the examination, participants will be awarded three certificates:

1. TQUK Diploma in Blockchain Technology (Level 5) Certificate
2. iHashing Academy Certificate: MicroMaster Blockchain Technology Certificate
3. Green Blockchain Signum Network & Sigdao Foundation NFT Certificate

The qualification level can be used as a reference by employers and institutions at their discretion and it can be advanced to renowned universities in the UK, Australia, and Canada.

Who Should Take This Course?

Senior Leadership & Decision Makers

- Business leaders aiming to stay competitive in digital transformation

Product & Program Managers

- Professionals seeking innovative approaches to product development and management

Innovation Managers, Startups & Entrepreneurs

- Innovators eager to build ventures in blockchain and emerging technologies

Advisors & Business Analysts

- Industry experts committed to offering cutting-edge technological insights

Developers, Creators & Marketers

- Tech and creative talents looking to integrate blockchain into their specialties

Career Changers

- Working adults looking to pivot into high-growth tech industries

Global Opportunity Seekers

- Talents looking to build a career on the global stage

Secondary School Graduates

- Form 6 graduates seeking alternatives to traditional university paths/ overseas study

Lifelong Learners

- Professionals passionate about emerging tech and continuous growth

Admission Requirement

NO web development or programming knowledge required to get started!

We will definitely move you at fast pace!

- 2 years of working experience in related field or
- An English language level equivalent to DSE Level 3 or HKCEE English (Syl. B) grade E or
- Demonstrated strong interest in blockchain technology



← [Enrolment Form](#)





Mr. Andy, Chi Kwong Lam

Director, Developer and Instructor, IHASHING ACADEMY

Andy Lam is a seasoned FinTech and blockchain educator with over 20 years of industry experience and 8+ years specializing in Web3 technologies. Andy is a leading contributor to the Signum Network and an expert in DAPP, DeFi, Real-World Assets (RWA), and NFTs. As an Australia Global Talent Nominee in FinTech and Blockchain and IQA, Andy has delivered training across major platforms including Cyberport, HKU, OUHK LiPACE, and the Hong Kong Federation of Trade Unions. His practical, innovation-driven approach to blockchain & web3 education has earned widespread recognition, including accolades from BusinessFocus, HKCT, Business Innovator, and the TQUK Excellence Awards. With a strong commitment to accessible and future-ready tech training, Andy equips learners with hands-on skills and credentials that open doors to international opportunities.

Acievements:

- **AUSTRALIA GLOBAL TALENT NOMINEE (FINTECH, BLOCKCHAIN)**
- **HKU, Centre for IT in Education Guest Speaker - The Green web3 revolution**
- **Hong Kong Representative on 2024 World Artificial Intelligence Conference (WAIC) by Cyberport & China**
- **WIKIEXPO HK - Supporting Partners 2024**
- **DES2024 Nominated Exhibitor**
- **HKCT BUSINESS AWARDS 2023 - Most Outstanding Blockchain & Web3 Solutions**
- **BUSINESS INNOVATOR 2023 Most Innovative Enterprise Award - The Best Blockchain Education, Application & Solution of the Year 2023**
- **BusinessFocus Excellence Awards 2023 - Blockchain Solutions & Web3 Education**
- **TQUK Excellence Awards 2022 - Innovation Award**
- **TQUK Internal Quality Assurance & Course Assessor, TQUK RQF endorsed courses provider.**
- **Lecturer & Speaker of Cyberport Academy, Blockchain Foundation Courses at Hong Kong Federation of Trade Unions, SFC-CPT blockchain courses for legal & financial industry managerial staff, computer & technology public courses at OUHK LiPACE**
- **Verified Teacher of Code.org & Quizizz AI Certified Educator**
- **DTSPS Registered Solutions Provider, Founders of series fintech & blockchain companies, and Cyberport Incubation Programme and Startup Alumni**
- **Developers of SIGNUM (formerly Burst) Blockchain Network - TOP 400 blockchain project worldwide. Publisher of BURSTPAY & Phoenix wallet, SIGDAO.IO & series Web3 Projects on Google Play & App Store with over 200000 users**
- **OpenSource Developers & Arctic Code Vault Contributors**



Mr. William, Wai Lam Sin
Trainer, IHASHING ACADEMY

William Sin is a blockchain and fintech expert with extensive education and training in the field. He completed courses in Digital Transformation, covering AI, IoT, cloud, blockchain, and cybersecurity at the Massachusetts Institute of Technology, and earned a Professional Certificate in Blockchain from the University of California, Berkeley. Also, he holds Professional Diplomas in Computer Sciences & Professional Certificates in Fintech from the University of Hong Kong. William's contributions to the sector have been recognized with several awards, including the Most Outstanding Blockchain & Web3 Solutions at the HKCT BUSINESS AWARDS 2023 and the BusinessFocus Excellence Awards in Blockchain Solutions & Web3 Education. As a certified educator registered with EDB, William has delivered specialized blockchain courses for legal and financial professionals, and he is a regular speaker and lecturer at major industry events. His expertise and forward-thinking approach make him a leading figure in blockchain education, equipping professionals with the skills necessary to thrive in the digital economy.

Achievements:

- **Hong Kong Representative on 2024 World Artificial Intelligence Conference (WAIC) by Cyberport & China**
- **WIKIEXPO HK - Supporting Partners 2024**
- **DES2024 Nominated Exhibitor**
- **HKCT BUSINESS AWARDS 2023 - Most Outstanding Blockchain & Web3 Solutions**
- **BUSINESS INNOVATOR 2023 Most Innovative Enterprise Award - The Best Blockchain Education, Application & Solution of the Year 2023**
- **BusinessFocus Excellence Awards 2023 - Blockchain Solutions & Web3 Education**
- **TQUK Excellence Awards 2022 - Innovation Award**
- **TQUK RQF Level 5 Diploma of Blockchain Technology IQA & Instructor.**
- **Lecturer & Speaker of Cyberport Academy, Blockchain Foundation Courses at Hong Kong Federation of Trade Unions, SFC-CPT blockchain courses for legal & financial industry managerial staff**
- **Founders of series fintech & blockchain companies, and Cyberport Incubation Programme and Startup Alumni**
- **Developers of SIGNUM (formerly Burst) Blockchain Network - TOP 400 blockchain project over the world, and Publisher of BURSTPAY & Phoenix wallet, SIGDAO.IO & series Web3 Projects on Google Play & App Store with over 200000 users**
- **OpenSource Developers & Arctic Code Vault Contributors**



Ms. Mandy Chiu

Trainer, IHASHING ACADEMY

- Project Management Professional (PMP)
- Certified Scrum Master (CSM)
- Senior Project Manager of listed financial companies.
- Leader of large-scale digital transformation projects, including data analysis, migration and system upgrades
- Project Manager with expertise in Operations Business Solutions, specializing in Special Projects, in Project Management Department
- Spearheaded projects to enhance operational efficiency and customer experience
- Managed fintech initiatives, including AI-powered chatbot and live chat services
- Director of system-related projects using Java, JSP, and mobile applications
- Proficiency in implementing cutting-edge technologies, including AI and automation
- Expertise in system integration and digital platform development
- Proficient in data analysis tools: Oracle 9i, MySQL, SPSS
- Programming capabilities: VBA, ASP, PHP
- Well-experienced in financial services regulations and compliance requirements, bridging technical concepts with practical business applications, leading cross-functional teams and manage large-scale technology projects
- TQUK RQF Level 5 Diploma of Blockchain Technology Assessor
- Master of Science in Information Technology, UST - Hong Kong
- Bachelor's Degree in Information Technology, QUT - Australia

TQUK (Training Qualifications UK)



Internationally recognized TQUK certification: TQUK (Training Qualifications UK) is a leading qualification certification body in the UK with high international recognition. The TQUK Level 5 Diploma is equivalent to higher education qualifications in Hong Kong, UK, USA, Australia and Canada, providing strong support for your academic and professional career.

Comprehensive curriculum: Covers both theory and practice of blockchain technology, from basics to advanced topics, ensuring students can fully master blockchain technology.

High-quality teaching resources: Includes in-depth practical guidance from top blockchain experts, ensuring students acquire the latest and most practical knowledge.

Training Qualifications UK (TQUK) is a qualification awarding organization in the UK regulated by Ofqual (Office of Qualifications and Examinations Regulation). It offers over 300 UK qualification courses covering various professional fields. iHashing Academy is a partner center of TQUK, collaborating to offer TQUK endorsed course to enhance students' qualifications.

For details, please visit: www.tquk-esea.org/about-us



TQUK Certificate

The Level 5 recognized certificate is comparable to an Higher Diploma in Hong Kong's qualifications framework.

Although this course is not formally registered in Hong Kong, this certificate is audited and recognized by an officially approved third-party organization in the UK. The qualification level can be used as a reference by employers and institutions at their discretion. We are currently in discussions with various universities in the UK, Australia, and Canada, and there is potential that graduates may be able to use this certificate to apply for Master's Degree programs or Top-Up Degree programs in Computer Science, Artificial Intelligence (AI), or Data Science for further academic advancement.



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<https://ihashing.hk>

Enrolment Form



IHASHING ACADEMY

// Top Asia Pacific Live-Class Blockchain
& Web3 FutureSkills Academy //



Website: ihashing.hk

Email: iacademy@ihashing.hk

Community:

IG: <https://instagram.com/ihashing.hk>

FB: <https://facebook.com/ihashing.hk>

Threads: <https://threads.net/ihashing.hk>

LinkedIn: <https://linkedin.com/company/ihashing>

Github: <https://github.com/ihashing>

Youtube: <https://youtube.com/@ihashing>

Medium: <https://medium.com/ihashing>

Discord: <https://discord.gg/r4ry7vQf9D>

Bridging UK & AUS Program

Tuition Fee: HKD 68,000

BSc (Hons) Business Computing Information Systems
BSc (Hons) Cyber Security and Networking

Tuition Fee: HKD 73,000

BSc (Hons) Computing (Level 6)
BSc (Hons) Cyber Security (Level 6)

Tuition Fee: HKD 108,000

Msc Cyber Security

Tuition fee can be paid in 2 installments
Final tuition fee upon adjustment by Universities.

Stay tuned, more programs are coming...



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