



Arabian Institute For Training

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# Certified Blockchain Professional

## Why Attend

- 10% of the global gross domestic product (GDP) is likely to be stored on the blockchain by 2027, as forecasted by The World Economic Forum (WEF). Is your organization ready for it?
- Blockchain has enormous potential outside the world of cryptocurrencies. More than a way to transact for tokens representing numerous types of assets, shared ledgers possess significant potential for business as they commoditize trust, thanks to decentralization, transparency, and immediate transfer of value. Smart-contracts make it possible to streamline business processes, create incentive schemes within ecosystems and facilitate machine-to-machine payments.
- In April 2018, the UAE Government launched the Emirates Blockchain Strategy 2021, which aims to capitalize on the blockchain technology to transform 50% of government transactions onto the blockchain platform by 2021. Besides the UAE Government, many private companies and other GCC organizations have initiated their blockchain projects.
- Now, more than ever, organizations need to understand the potential of blockchain technology and how it might affect their competitive landscape. Looking into real-world applications across a large set of industries, this course deep-dives into the working of blockchains, helps you navigate through the use-cases for your industry, and sheds light on the regulatory, business and implementation aspects of blockchain.

## Course Methodology

- This course relies on detailed and visual slides, videos, practical examples, group discussions, small individual exercises, larger group exercises, and presentations from the participants.

## Course Objectives

By the end of the course, participants will be able to:

- Understand the inner workings of public and permissioned blockchains
  - Assess the viability of blockchain use-cases
  - Select the best blockchain platforms and service providers depending on the use case
  - Consider the business and regulatory implications of blockchain
  - Design blockchain solutions and lay out implementation strategies for their organizations
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## Target Audience

- This course is for analysts, managers or C-level executives who will work with blockchain on a daily basis or are in need of knowledge to develop a blockchain strategy. The aim is that by the end of the three days, all participants will be blockchain professionals who can flourish as blockchain experts within their organizations and careers.

## Target Competencies

- Cryptographic concept
- Blockchain platforms and solution providers
- Blockchain architecture
- Blockchain governance
- Use case development and implementation

### Blockchain fundamentals

- The why of blockchains
- The concept of distributed storage
- A brief introduction to the concept of private and public blockchains
- An introduction to the rules of the blockchain
- A more technical deep-dive (into Bitcoin or Ethereum)
- Cryptographic concepts (e.g., hashing, key pairs, digital signatures)
- Block structure
- Consensus mechanisms
- Wallets and exchanges
- The three types of blockchain applications with concrete industry examples
- Data storage
- Transfer of value
- Smart-contracting
- The latest advancements of the technology
- The future of blockchains
- The challenges in implementing blockchains

### Deep dive into tokens and their use in smart-contracts, ICOs, Dapps and DAOs

- Token types and purposes
  - Utility & rights
  - Token value
  - Value distribution
  - Supply & inflation
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## Permissioned blockchains

- Technical layer
- Consensus models
- Data management
- Token layer
- Purpose of tokens
- Incentive systems of permissioned blockchains without tokens
- Governance layer
- Identity management
- Creation of consortiums
- Decision making processes
- Off-chain governance systems

## Use-cases across various industries and their business impact

- Financial services
- Insurance
- Healthcare and pharmaceuticals
- Public services
- Energy
- Media and advertisements
- Internet of Things

## Business models and regulatory considerations

- Qualified blockchain use-case
- Regulation of tokens
- Possible taxation
- GDPR

## Blockchain platforms and service providers

- Blockchain platforms relevant to business
  - “Blockchain as a service” software providers
  - IBM Hyperledger
  - Microsoft Azure
  - Amazon AWS
  - Consensus Kaleido
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