

**ROCHESTON<sup>®</sup> CERTIFIED**  
**BLOCKCHAIN ENGINEER**



# Blockchain

A public registry of information collected through a network using the Internet is called a blockchain. The blockchain technology offers enormous potential due to the way the information is processed.

Blockchain technology is not facilitated through an app, nor is it a company, but an innovative way of documenting data on the internet. The technology can be used to develop blockchain applications in a range of segments, including games, storage platforms, prediction markets, social networks and many more. It is also dubbed as 'The Internet 3.0' owing to its similarity to the Internet.

Information stored on a blockchain can take several forms. For instance, a transaction, denoting transfer of money or the amount of electricity used by a light bulb can be stored using this technology. However, it requires verification from several devices such as tablets or computers on a network. Once a consensus or an agreement is reached between the devices to store using a blockchain, it cannot be altered, removed or disputed without the permission and knowledge of the parties who made that record as well as the larger community.



# Benefits of Blockchain

Information recorded on a blockchain exists as a database that is shared and continuously reconciled. It does not exist as a centralized network, which would make it vulnerable to hackers. Rather, it is hosted by millions of computers in tandem and the data is accessible to anyone on the Internet.

Blockchain technology, similar to the internet, comes with an added layer of security. As information is stored in blocks across its network, the blockchain cannot be managed or controlled by a single entity, nor does it have a single point of failure.

The blockchain network exists in a state of agreement that automatically checks itself every ten minutes. It is a type of self-auditing ecosystem of digital value, where the network compiles every transaction that happens in ten-minute intervals.

# The result is; two important properties:

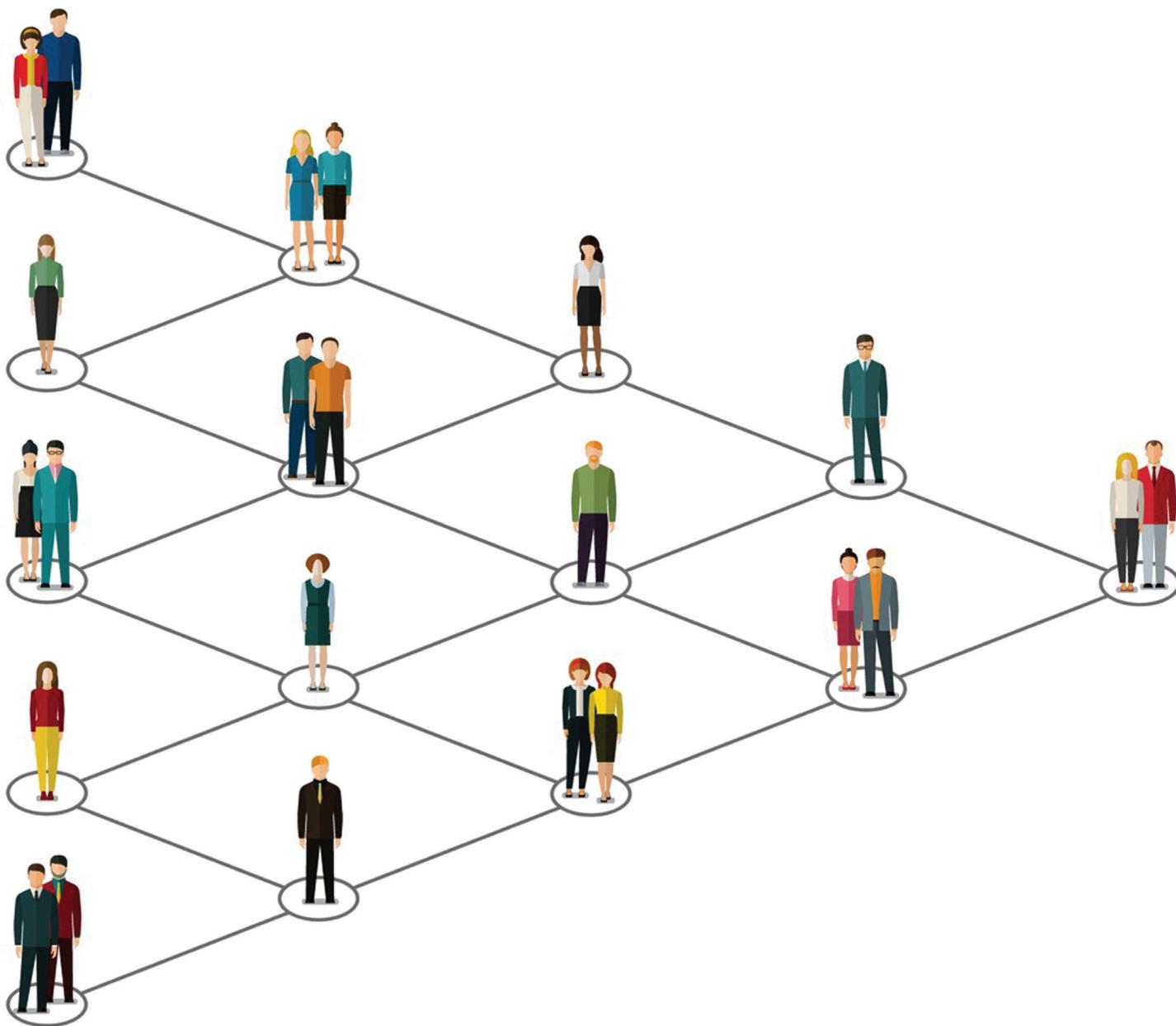
## 1. Transparency

As transparency data is embedded in the network, it is public by definition. Any unit of information on the block chain cannot be altered easily and it would require a huge amount of computing network to override the entire network.

## 2. Blockchain Network

Any activity on a blockchain network is a function of the network as a whole. New implications would arise from this. Traditional commerce could become unnecessary as there will be a new way to verify transactions. Stock market trading could become simultaneous on the blockchain and it can be used for record-keeping such as land registry, fully public.





# Who will use Blockchain?

Currently, the finance market finds the strongest use for the technology e.g. International transactions. There is also a high demand for blockchain developers.

For these types of transactions using blockchain, middlemen would be cut off. While personal computing were put to use by the general public with the invention of Graphical User Interface (GUI) in the form of a desktop, blockchain eliminated the risks of data being held centrally as data is held across a network.

Blockchain network is devoid of centralized points that are vulnerable to hackers. Storing data on blockchain can also make it incorruptible and online transactions are closely connected to the process of identity verification.

Its network lacks centralized points of vulnerability that computer hackers can exploit.

Store your data on the blockchain and it is incorruptible. All the online transactions are connected to the identity verification processes.

As data is stored across a network, the blockchain eliminates the risks associated with a data store in a single data center.



# What is the role of a RCBE?

A Rochester Certified Blockchain Engineer (RCBE) will identify opportunities for transformation/disruption through blockchain including emerging opportunities in cryptocurrencies, ICOs and DAOs.

An RCBE will also develop enterprise-focused use-case and determine blockchain governance, business models, customer experience and partner/channel impacts.

Develop the blockchain Lean Canvas and Blockchain business case for the Proof-of-Concept/ MVP development.

Establish and govern minimum standards for credentialing solidity as it specializes in enterprise development measures.

Create awareness among the public that credentialed individuals who meet or exceed the minimum standards.

Establish blockchain expertise as a distinct and self-regulating profession.

# Why is it important to have an RCBE?

## 1. Transparency

A clear, neat and transparent network, is what people are looking for in future technologies, making Blockchain technology, the preferred and most likable choice among the different technologies available in the market. In blockchain technology, everything is clearly displayed on the network, leaving no chance for discrepancy.

## 2. Security

Hackers today use all the tricks of the trade to hack into devices for illegal purposes. Due to the increasing number of hackers breaking into devices, the need for security has risen exponentially, this is where blockchain technology promises to provide a robust security environment. Blockchain technology has been developed to be hack-proof, wherein if a hacker succeeds, all information of the block gets corrupted, making it the most secure network.

## 3. Inexpensive

Most traditional modes of financial transaction are rather expensive. On the contrary, with a Blockchain network, it is not necessary to invest in a brick and mortar model or paying huge commission for financial services, as it reduces cost extensively.

#### **4. Intellectual Property (IP) Management**

Blockchain technology opens avenues for better cataloguing and protection of original work. Authors, artists, bloggers and the like are at the moment unable to easily record their work and prevent it from copyright infringement. The emergence of Blockchain technology, will ensure that every piece of work gets properly catalogued without any hardships.

#### **5. Secure Platform**

Blockchain technology is a powerful digital platform which has the strength to nullify all the discrepancies of a traditional network. It provides a platform that securely preserves the value of work or intellectual property.

#### **6. Creating a better sharing economy**

The blockchain technology offers a fluid method of doing business. It provides all suppliers and buyers a secure & trusted network to trade without any fear. Blockchain ensures great support and security that encourage manufacturers and traders to confidently manage their businesses.

## **7. Opening up manufacturing**

Today, 3D printing is a boon to many entrepreneurs, who look to the gap between users and manufacturers. However, many businesses still prefer the centralized market and are skeptical to sell their products online, as their concerns are largely based on the protection of their IPs. Blockchain technology allows the user to safely save work, upload digital pictures of financial documents and digital signatures on the block or smart contract.

## **8. Prevents payment scams**

As everything in blockchain is accounted and kept track, it is difficult for discrepancies and corruption to infiltrate. Another reason why this technology is so secure, is because if a transaction occurs, digital signatures are required from both parties, to avoid any kind of fraud.

## **9. Transactions in minutes**

Blockchain technology allows money/financial transactions in just a matter of minutes, without wasting time.





## How Rocheston prepares you to be an RCBE?

The RCBE curriculum has been created by Rocheston's subject matter experts (SMEs), who have done research to come up with content that is practical and fits perfectly with the current industry standards. It intends to equip you with ample knowledge to take on the prevailing circumstances at most dynamic blockchain protocols with confidence and intelligence, necessary for a CBE.

The course acts as a stepping stone to become an exceptional CBE, who can turn tables in a dynamic organization with the acquired insights. The RCBE course by Rocheston is a strong foundation for your career as a Blockchain Engineer.



# The RCBE Program

The RCBE course is a 5-day interactive learning capsule conducted in a seminar format by Rocheston Certified Trainers.

It will be conducted every month in venues all over the world. The course participants can expect exquisite and warm hospitality, as the sessions will be conducted in luxury star hotels.



# What is the RCBE course?

Three years in the making, the RCBE course acts as a one stop shop curriculum for Blockchain engineering and development. Carefully curated by Subject Matter Experts, the RCBE course dives into the basic explanation of a distributed ledger to its complex computational scalability.

The course aims to equip you with the most relevant blockchain protocols in the market today and provide a dynamic ecosystem that allows you to build, innovate and harvest the power of the Blockchain Technology. The RCBE course will place you among a group of elite innovators leading the disruption, aptly titled as Internet 3.0



# What will be the course structure?

- 5-day Training Program
- Time: 9:30 AM – 6 PM
- Cyberclass® Web Portal
- Seminars conducted by Rocheston Certified Trainers
- In-class Environment

Proctored Exam to be written on the last day on the VUE platform

## How much does the RCBE course cost?

Course Fee - USD 1299/-

Exam Fee - USD 799/-

Exam Retake Fee - USD 400/-



# Certificate

The candidates who successfully pass the RCBE exam will receive the Rochester Certified Blockchain Engineer credential.

ROCHESTON® CERTIFIED  
BLOCKCHAIN ENGINEER

THIS CERTIFICATE IS PRESENTED TO

**Jason Springfield**

FOR COMPLETING ALL THE REQUIREMENTS TO BECOME A  
ROCHESTON CERTIFIED BLOCKCHAIN ENGINEER  
8<sup>TH</sup> SEPTEMBER, 2018



HAJA MOHIDEEN  
PRESIDENT & CEO

ROCHESTON®



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Develop the blockchain Lean Canvas and Blockchain business case for the Proof-of- Concept/MVP development.



Establish blockchain expertise as a distinct and self-regulating profession.



Create and support a Secure Data Sharing Network, Internal Communications Network and Sustainable Cybersecurity Ecosystem for their corporations.



Provide training and support to their peers in terms of navigating Blockchain.



Bring about a highly scalable and accessible Blockchain model to enable the company to grow faster than ever.



Identify and provide inherent value for future Blockchain solutions and tokens through technological innovation.



ID	Description
1234	
2567	
3456	Id rutrum
0400	Sed interdum
4729	Pellentesque
4030	Maecenas
4893	Integer
	Quisque

Sed interdum  
Aenean  
Donec

ipis

ment  
suscipit  
lorem fames  
nulla efficitur

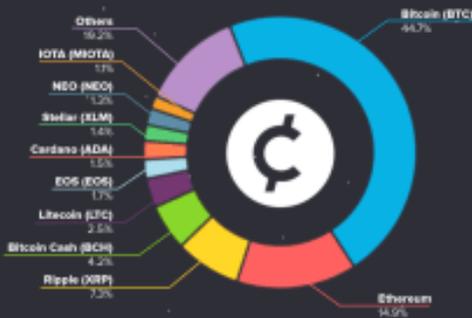
Tax  
Other

# Prerequisites of a RCBE

As the blockchain protocols are numerous and versatile, the base requirement of the courses are:

- Basic knowledge of software development processes
- Proficiency in at least one programming language
- Awareness of Cryptocurrencies and other Blockchain technologies

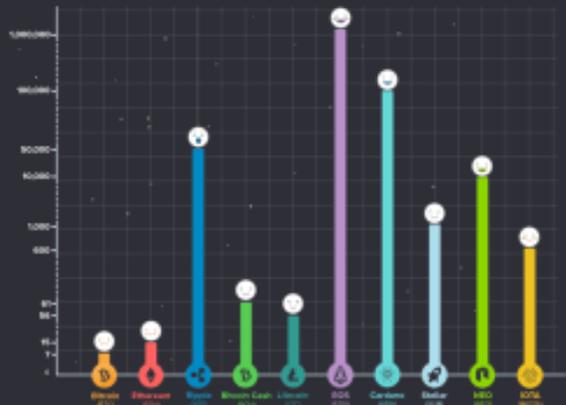
**TOP 10 CRYPTOCURRENCIES MARKET CAP BY 2018.4**  
1588 Types of Cryptocurrencies on the Market



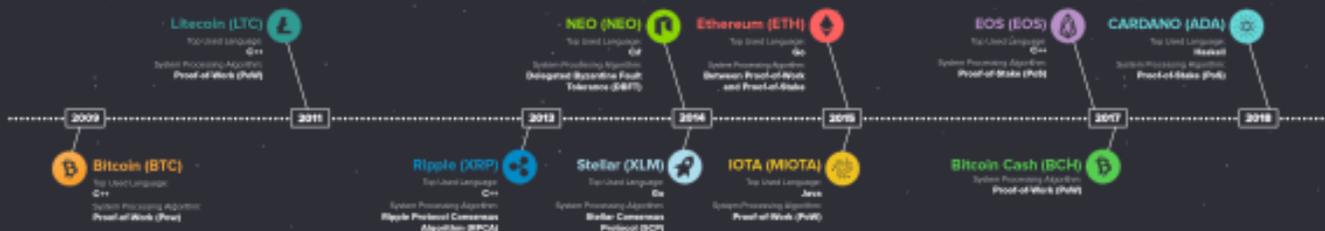
**TOP 10 MOST POPULAR CRYPTOCURRENCIES**  
@CodingDejaDotCo



**SCALABILITY COMPARISON**  
(Transaction Number / Second)



**YEAR FOUNDED TOP 10 MOST POPULAR CRYPTOCURRENCIES**



**REFERENCE**

- [www.coingecko.com](https://www.coingecko.com)
- [www.bitcoin.org](https://www.bitcoin.org)
- [www.litecoin.com](https://www.litecoin.com)
- [www.xrp.com](https://www.xrp.com)
- [www.stellar.com](https://www.stellar.com)
- [www.neo.org](https://www.neo.org)
- [www.iota.org](https://www.iota.org)
- [www.eos.io](https://www.eos.io)
- [www.cardano.org](https://www.cardano.org)
- [www.bitcoincash.com](https://www.bitcoincash.com)

# Who can be a RCBE?

Due to Blockchain's large scale application potential, future RCBEs can come from the following fields:

- Programmers & Developers
- Software Engineers & Architects
- Application Architects
- Cryptocurrency Enthusiasts
- CTO, VP - Engineering, VP - Technologies
- Security Professionals, Administrators
- Govt. Officials
- Professors, Researches and Students

# Is there a demand for RCBE?

With more and more corporations adopting the benefits of Blockchain technology, below are a list of some, but not limited to, companies who are looking to hire blockchain engineers:

Accenture

IBM

Oracle

Walmart

JPMorgan Chase

FedEx

Microsoft

Facebook

Circle

KPMG

Bank of America

Amazon

EY

and many many more.

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