

Proposal on

# Understanding Blockchain and Distributed Ledger Technology

Supported by:



BLOCKCHAIN  
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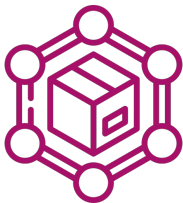
## Company Profile

eSatya is blockchain initiative by Rumsan Associates in Nepal that specializes in development, consulting and awareness. We believe blockchain technology can provide new infrastructure to build the next innovative applications beyond cryptocurrencies, driving profound, positive changes across business, communities and society.

## Vision

Pioneer a blockchain ecosystem in Nepal to advance social and economic growth of the country.

## What we do?



Design and develop blockchain products and enterprise solutions. We are developing blockchain products for asset management, supply chain, and identity management.

### Product Development



Conduct regular meetups, national events, and workshops to increase the level of expertise and adoption of blockchain in Nepal.

### Training and Awareness



Provide enterprise level workshops and strategy assessments as well as proof of concepts and pilot studies to industries and organizations in finance, health, insurance, aid, and government sectors.

### Strategy and Consulting

## Team



**Ruchin Singh**

Project Lead

[Linkedin](#)



**Santosh Shrestha**

Technology and  
System Expert

[Linkedin](#)



**Raktim Shrestha**

Technical Lead

[Linkedin](#)



**Manjik Shrestha**

Blockchain Developer

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**Ashmita Shrestha**

Project Manager

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**Dr. Rajat Rajbhandari**

Advisor

[Linkedin](#)



**Rume Singh**

Advisor

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## Partners and Supporters



# Understanding Blockchain and Distributed Ledger Technology

This is an introductory session on basics of blockchain technology. The course will focus on the basics of blockchain technology and explore its core structure and mechanisms. The students will also explore blockchain wallets, smart contracts, NFT and DeFi.



## COURSE OBJECTIVES

- Understand the fundamental technology components of blockchain, proof-of-work and alternative consensus mechanisms, how they are applied and how the distributed ledger is structured at its core;
- Understand, use and explore blockchain wallets;
- Learn about DApps and mint NFT in OpenSea;
- Create a blockchain project



## WHO CAN ATTEND?

- Corporate and financial executives looking to incorporate blockchain into the workflow
- Government executive looking to connect policy to blockchain technology
- High school and college students trying to understand the scope of the blockchain
- CEOs, Board Members, and Senior executives looking into the crash course to get started in the blockchain
- Entrepreneurs looking into the next big technology
- Anyone who wants to learn the basics about blockchain

## SESSION DURATION

- The course will take approx. 6 hours for completion.

## SESSION COST

- NPR. 30,000/- (inclusive of taxes)

## SESSION DELIVERY

- Online and Onsite Sessions will be conducted



# SESSION DETAILS

Topic	Description
<b>Introduction To Blockchain</b> In this session, the participants will be introduced to the basics of blockchain and its use cases.	<ul style="list-style-type: none"> <li>Blockchain 101</li> <li>What is Blockchain and DLT?</li> <li>Blockchain Vs Cryptocurrency.</li> <li>Types of Blockchain – Public vs Private Blockchain.</li> <li>Benefits of using Blockchain Technology.</li> <li>DeFi, NFT, ICO</li> </ul>
<b>Blockchain Ecosystem</b> You get to learn about the underpinnings of blockchain technology. You will be introduced to several technology and theories which sums up to build a blockchain platform	<ul style="list-style-type: none"> <li>Blockchain Architecture –Distributed, decentralized, and P2P Network?</li> <li>Getting Familiar with Cryptographic hash functions</li> <li>Blockchain Data Structure</li> <li>Byzantine Fault Tolerance</li> <li>Understanding consensus algorithms– POW,POS,DPOS and POA</li> <li>Review of Blockchain Platforms– Bitcoin and Ethereum</li> </ul>
<b>Wallet</b> General idea of blockchain Wallets and its working mechanism. You will build your own web-based wallet	<ul style="list-style-type: none"> <li>What does a wallet do?</li> <li>Ethereum Address – (EOA and contract address)</li> <li>What is Metamask and how to use it? Example: Rumsan Wallet</li> <li>How to backup wallet – Mnemonic code for Wallets</li> </ul>
<b>Decentralized Application(Dapps)</b> Understand what Dapps are and design a simple NFT based Dapp	<ul style="list-style-type: none"> <li>What is Dapps?</li> <li>How does Dapps Work?</li> <li>How to use Dapps.</li> <li>Practical: How to Mint NFT in OpenSea using Metamask and how does it work</li> </ul>
<b>Use Cases</b> See few examples of blockchain technology and exercise to design your own blockchain product	<ul style="list-style-type: none"> <li>Use cases</li> <li>How to design your blockchain product?</li> </ul>

# INSTRUCTORS



**Manjik Shrestha**

Mr. Shrestha is an experienced Blockchain Developer. Experienced in developing decentralized applications on Ethereum and designing Enterprise permissioned blockchain in Ethereum. He is an alumni of ConsenSys Developers Bootcamp 2019 and currently assigned as a ConsenSys Ambassador for Nepal.



**Binod Chaudhary**

Binod Chaudhary is a Software Engineer actively working in the software development industry for more than 5 years. Has developed blockchain wallet which has been implemented to real world blockchain projects. Has also used blockchain based tools & libraries like Web3, Ethers JS, Metamask, ABIs.



**Ruchin Singh**

Singh has extensive experience in starting new ventures in the Nepali ecosystem. He regularly conducts workshops on business model canvas Nepali Entrepreneurs. Is currently researching and promoting blockchain technology in Nepal through eSatya.



**Ashmita Manandhar Shrestha**

Ms. Manandhar has extensive experience in conducting blockchain sessions, blockchain meetups, and blockchain series. Has successfully completed a course on Blockchain: Foundations and Use Cases through Consensus Academy.



**Rasil Baidar**

Rasil Baidar is a highly enthusiastic software engineer working on software development for over 2 years. He has been involved in many web based application development, and has ample experience in the development of Web3 applications as well.

## CONTACT US



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a part of Rumsan Group of Companies

