



Blockstream
Institute



**Course
description**

How Bitcoin works

Description

The fundamental elements of Bitcoin, such as **validator nodes**, **miners**, and **blocks**, interact with each other according to **clear and shared rules**, which guarantee the security and decentralization of the network and are able to mathematically avoid the problem of so-called "**double** spending," thanks also to interaction with **wallets**, which come in many different types and require adequate understanding.

Duration: 8h

Methodology: e-learning and live webinar

Contents

Basic functions

The internal workings of a Bitcoin wallet (60')

- Hash functions
- Digital signatures
- The mnemonic phrase
- Creating a Bitcoin wallet

Obtaining your first Bitcoins (50')

- General prerequisites
- Understanding what you are getting into
- Setting up a plan
- Protecting your heirs and assets

Privacy on Bitcoin (80')

- Key concepts and definitions
- Understanding Chain Analysis
- Understanding practices to improve privacy
- Understanding Coinjoin transactions
- Additional advanced privacy techniques

Webinar - Q&A and in-depth analysis (90')

Configuring and using a Bitcoin wallet (120')

- Choosing a wallet
- Key and seed phrase generation
- Generating a transaction
- Creating a Lightning Network wallet for micropayments
- Accepting Bitcoin payments

Webinar - Use cases and specifics (90')