

# COURSE: BLOCKCHAIN TECHNOLOGY & WEB3 BASED BUSINESS MODELS

This course introduces the fundamentals of blockchain, smart contracts, and tokenization, and shows how these technologies enable Web3 ecosystems. Students learn to assess blockchain networks and evaluate Web3-based business models through practical examples.

## Qualification target:

### Digital Technology:

- Students should have a basic knowledge of information technology: Basic concepts of IT, software development, hardware and communication, IT and internet architecture
- The course deals the drivers of digitalisation: Digitalisation (agile methods, Industry 4.0, Big Data), Cloud computing, Artificial Intelligence

### Blockchain Technology:

- Understand main concepts of blockchain technology
- Understand basics of smart contracts and tokenization
- Be able to evaluate smart contracts within a certain context
- Analyze/evaluate blockchain networks on a high flying level

### Web3 based Business::

- Understand Web3 and Blockchain based business logic
- Understand how blockchain enables web3
- Be able to evaluate Web3 based business models
- Learn about various web3 products



## Subcourse 1: Digital Technology:

- Basic concepts of IT, software development,
- hardware and communication, IT and internet architecture
- Digitalisation (agile methods, Industry 4.0, cloud computing, artificial intelligence)

## Subcourse 2: Blockchain Technology:

- Blockchain Infrastructure
- Blockchain different consensus mechanisms
- Blockchain Smart Contracts

## Subcourse 3: Web3 based Business:

- Blockchain Infrastructure
- Blockchain different consensus mechanisms
- Blockchain Smart Contracts

## Certificate degree:

Digital further education at university level – our part-time, system-accredited digital study programme at the Digital Business School of the HfWU. Certificates are issued by the Nürtingen-Geislingen University of Applied Sciences.

1 course, 6 ECTS -> No formal requirements for participation

## Organization:

**Lecturer:** Philipp Riedlinger

**Workload:** 150 hours

**Framework:** Lecture, discussions, exercises and case studies

**Examination:** Student research project (100%)

**Course Language:** English