

## Topic

# CAS in Blockchain

Blockchain is on everyone's lips – not least because the Crypto Valley stretching from Zug to Zurich is one of the global centres for this technology. Switzerland is a World-wide blockchain hub, and the University of Zurich has demonstrated its commitment to the field by establishing a Competence Center in the area of Blockchain to coordinate and foster research, education and interaction with industry and societal stakeholders.

But what is the story behind the new «Internet of Value»? What can this technology already do? What are its strengths, weaknesses, risks and areas of potential? What are consequences and defects of distributed ledgers controlled by corporations and governments? The CAS in Blockchain at the University of Zurich looks at these questions and in doing so addresses the topic at a uniquely wide-ranging level: computer scientists, lawyers, economists and finance specialists from the University of Zurich join forces to teach participants the technical basics as well as provide them with legal tools and economic knowledge about the possible applications. In doing so, they are able to call on first-hand experience from academic blockchain projects, consulting activities and company start-ups.

### Course objectives:

The objectives of the CAS are to provide participants with:

- a scientifically substantiated assessment of the potential and limitations of blockchain technologies.
- the technical, economic and legal tools to start their own blockchain project.
- an insight into state-of-the-art technologies and future developments in the area of blockchain.

## Information

# Application

### Contact

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Department of Informatics  
Continuing Education in Informatics  
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Website: [www.ifi.uzh.ch/cas-blockchain](http://www.ifi.uzh.ch/cas-blockchain)

### Application

- Please submit your written application, including your curriculum vitae, to the aforementioned contact person.
- The application period ends on 23 August 2021.
- We recommend that you apply soon due to the high level of interest in this topic.

### Information event

An online information event on the CAS will be held at 6 p.m. on 6 May 2021.  
Detailed information can be found on the course website: [www.ifi.uzh.ch/cas-blockchain](http://www.ifi.uzh.ch/cas-blockchain)



University of  
Zurich <sup>UZH</sup>

Continuing Education

# Blockchain

Certificate of Advanced Studies CAS  
Faculty of Business, Economics and  
Informatics, University of Zurich  
UZH Blockchain Center

# 2021

# Overview

<p><b>Target audience</b> Professional practitioners who want to receive an in-depth insight into the various facets of blockchain technologies and gain an edge in knowledge based on relevant research findings.</p>
<p><b>Admission criteria</b> University degree at master's level or an equivalent qualification as well as basic knowledge in the fields of IT, law and economics.</p>
<p><b>Number of participants</b> Maximum of 30 participants.</p>
<p><b>Lecturers</b> The lecturers belong to the teaching staff of the Blockchain Center of the University of Zurich. Among them, nine Professors from all the areas involved teach the largest part of the program. For individual topics, lectures will be provided by external experts.</p>
<p><b>Governance</b> Faculty of Business, Economics and Informatics, University of Zurich, Prof. Dr. Gerhard Schwabe, Prof. Dr. Claudio J. Tessone, Prof. em. Dr. Rolf H. Weber</p>
<p><b>Management</b> Prof. Dr. Gerhard Schwabe, Department of Informatics UZH Prof. Dr. Claudio J. Tessone, Department of Business Administration UZH Prof. em. Dr. Rolf H. Weber, Department of Law UZH</p>
<p><b>Degree</b> Certificate of Advanced Studies UZH in Blockchain (10 ECTS Credits)</p>
<p><b>Course duration</b> Course days: 10 September until 30 October 2021, on Fridays and Saturdays Project work: December 2021</p>
<p><b>Costs</b> CHF 8 500.–, including course documentation</p>
<p><b>Venue</b> Center for Continuing Education of the University of Zurich Schaffhauserstrasse 228, 8057 Zurich (www.zwb.uzh.ch)</p>

# Curriculum

<p><b>Structure</b> The study programme is divided into three modules: – Blockchain Technology (3 ECTS Credits) – Blockchain Business and Economics (4 ECTS Credits) – Blockchain Regulation and Law (3 ECTS Credits)</p> <p>A total of 10 ECTS Credits are required in order to successfully complete the CAS. Each module is worth 3 or 4 ECTS Credits. An ECTS Credit corresponds to a workload of around 30 hours. This comprises attendance time during the course days as well as preparatory and follow-up work.</p>
<p><b>Process and assessment</b> – An assessment must be completed for each module. – For the first module, this takes the form of a multiple-choice test on all topics covered in the module. – For the second and third module, a written paper on a selected topic (on all topics covered during the entire course) must be completed. Literature research as well as case studies, evaluations and practical studies are possible. Participants opt for a topic during the course of the module following consultation with a lecturer. The work should comprise approximately 15 pages and be written in German or English.</p>
<p><b>Teaching language</b> English. The course documents are generally in English.</p>

# Programme

Module 1: Blockchain Technology	Lecturers
Introduction to Blockchains	Prof. Dr. Burkhard Stiller
Blockchain Platforms and Architectures	Prof. Dr. Burkhard Stiller Prof. Dr. Thomas Bocek
Smart Contracts	Prof. Dr. Abraham Bernstein Dr. Daniele Dell'Aglio
Module 2: Blockchain Business and Economics	
Enterprise Blockchains	Prof. Dr. Gerhard Schwabe
Cryptocurrencies	Prof. Dr. Thorsten Hens
Applications of Public Blockchains	Prof. Dr. Helmut Dietl
Blockchain Cryptoeconomics and Analytics	Prof. Dr. Claudio J. Tessone
Module 3: Blockchain Regulation and Law	
Introduction, Token Regulations and DLT-Law	Prof. Dr. Rolf H. Weber
Token Use Cases Smart Contracts	Dr. iur. Karin Lorez Prof. Dr. Peter Picht
Property Law Data Protection	Prof. Dr. Alfred Früh Prof. Dr. Florent Thouvenin