Valid from 2026.FS

Module description: Business Value of Blockchain

Module Code	w.BA.XX.2BVB.XX
ECTS Credits	3
Language of Instruction/Examination	English
Module Description	The Bitcoin price surge has led to extreme hype surrounding blockchain technology. However, blockchain technology is much more than just a technological framework for Bitcoin. It enables new applications in finance, art, community management, and in the metaverse. This module enables students to explore the technical and economic foundations of blockchains. In the first part, students will gain a thorough understanding of the technology, the economics of blockchains, and the thriving Swiss blockchain ecosystem. In the second part, students will explore in depth issues such as NFTs, DAOs, DeFi, and many others. In this module, students work in interdisciplinary teams to study different blockchain application fields.
Organizational Unit	Institute for Organizational Viability
Module Coordinator	Florian Spychiger
Deputy Module Coordinator	Michael Lustenberger
Program and Specialization	• Elective module (see module table)
Legal Framework	Academic Regulations BSc dated 29.01.2009, for the degree programs in Business Administration, International Management, Business Information Technology, Business Law, Business Law and Applied Law, first adopted on 12.05.2009
Module Category	**Module Type** Compulsory Elective **Program Phase** Main Study Period
Prerequisite Knowledge	None
Contribution to Program Learning Objectives (by the concerned Module)	• Professional Competence • Methodological Competence • Social Competence • Self-Competence
Contribution to Program Learning Objectives	**Professional Competence** • Knowing and Understanding Content of Theoretical and Practical Relevance • Apply, Analyze, and Synthesize Content of Theoretical and Practical Relevance • Evaluate Content of Theoretical and Practical Relevance **Methodological Competence** • Problem-Solving & Critical Thinking • Scientific Methodology • Work Methods, Techniques, and Procedures • Information Literacy • Creativity & Innovation **Social Competence** • Written Communication • Oral Communication • Teamwork & Conflict Management • Intercultural Insight & Ability to Change Perspective **Self-Competence** • Self-Management & Self-Reflection • Ethical & Social Responsibility • Learning & Change

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Module Learning Objectives

Students...
- are able to identify possible use cases for blockchain technology and to explain its business value.
- can explain how blockchain technology works.
- can name important players of the Swiss blockchain ecosystem and can identify new developments in the field.
- learn to analyze the opportunities of blockchain technology within a team.
- gain some initial hands-on experience with blockchain technology.
- expand their critical thinking and the ability to develop "creative solutions" by designing a workshop.
- can evaluate possible future economic systems based on decentralization.

Module Content

- High-level introduction to Blockchain I
- High-level introduction to Blockchain II
- Consensus
- Smart contracts
- Scaling/interoperability
- Economic incentives/governance
- Mid-term exam & topic selection
- DeFi
- DAOs & NFTs
- Dark side of blockchain
- Student workshops
- Practice presentation
- Student workshops
- Miniquiz + wrap-up

Links to other modules

This module is linked to the following modules:

Digital Learning Resources

- Practice and Application Exercises (with Key)
- Multiple Choice Tests

Methods of Instruction

- Interactive Instruction
- Exercises
- Lecture
- Explorative Learning
- Literature Review
- Project Work
- Problem-Oriented Teaching
- Application Tasks

Social Settings Used:
- Individual Work
- Group Work

Type of Instruction

	Classroom Instruction	Guided Self-Study	Autonomous Self-Study
Large Class	-	-	
Small Class	28 h	-	
Group Instruction	-	-	
Practical Work	-	12 h	
Seminar	-	-	
Total	**28 h**	**12 h**	**50 h**

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Performance Assessment

End-of-module exam	Form	Length (min.)	Weighting
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Permitted Resources			

Others	Assessment	Format	Length (min.)	Weighting
Written Assignment	Grade	Einzelarbeit	0	10.00
Written Assignment	Grade	Einzelarbeit	0	30.00
Talk/oral presentation	Grade	Gruppenarbeit	40	40.00
Written Assignment	Grade	Einzelarbeit	0	20.00

Classroom Attendance Requirement

Other

The teaching concept for this module requires students to attend the on-site lectures in Weeks 11, 12, and 13. Unauthorized absences will result in a grade reduction for the module.

Compulsory Reading

Recommended Reading

- Drescher, D. (2017). Blockchain Basics - A Non-Technical Introduction in 25 Steps. Frankfurt am Main, Germany: Apress. ISBN 978-1484226032.
- Antonopoulos, A. & Wood, G. (2018). Mastering Ethereum: Implementing Digital Contracts. 1st edition. Sebastopol, CA 95472: O'Reilly. ISBN 978-1491971949.
- Tapscott, D. & Tapscott, A. (2016). Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World. New York: Portfolio. ISBN 978-0399564062.
- Antonopoulos, A. (2017). Mastering Bitcoin - Programming the Open Blockchain. 2nd edition. Sebastopol, CA 95472: O'Reilly. ISBN 978-1491954386.

Comments

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