

2019.HS

Module Name: Business Value of Blockchain			
Module Code	w.BA.XX.2BVB.XX		
Module Description	The Bitcoin price surge has led to an extreme hype around blockchain technology. However, blockchain technology is much more than just the technological framework of Bitcoin. Currently, it is applied in fields such as finance, supply chain management, health care, energy trading, and many more. This module enables students to explore the business value of such blockchain applications. In the first part, students will gain a thorough understanding of the technology, and they will come up with their own blockchain application. In the second part, students will get to know the thriving Swiss blockchain ecosystem and current real applications. In collaboration with the University of Zurich and ETH Zurich, students will explore the new economic paradigm implied by the blockchain.		
Program and Specialization	<ul style="list-style-type: none"> § Business Administration - Accounting, Controlling, Auditing § Business Administration - Banking and Finance § Business Administration - Banking and Finance (FLEX) § Business Administration - Banking and Finance (PiE) § Business Administration - Economics and Politics § Business Administration - General Management § Business Administration - General Management (Flex) § Business Administration - General Management (PiE) § Business Administration - Risk and Insurance § Business Administration - Risk and Insurance (Flex) § Business Information Technology 		
Legal Framework	Academic Regulations BSc dated 29.01.2009, Appendix to the Academic Regulations for the degree programs in Business Administration, Business Information Technology, and Business Law, first adopted on 12.05.2009		
Module Category	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Module Type: Compulsory Elective</td> <td>Program Phase: Main Study Period</td> </tr> </table>	Module Type: Compulsory Elective	Program Phase: Main Study Period
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ECTS	3		
Organizational Unit	W Zentrum Unternehmensentwicklung Ltg.		
Module Coordinator	Florian Spsychiger (spyc)		
Deputy Module Coordinator	Michael Lustenberger (luse)		
Prerequisite Knowledge	No prerequisite knowledge needed, in particular no coding experience (although, if desired there is the possibility of coding in the individual project). A willingness to use new technologies is expected.		
Contribution to Program Learning Goals (Affected by Module)	<ul style="list-style-type: none"> § Professional Competence § Methodological Competence § Social Competence § Self-Competence 		
Contribution to Program Learning Objectives	<ul style="list-style-type: none"> Professional Competence <ul style="list-style-type: none"> § 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 <ul style="list-style-type: none"> § Problem-Solving & Critical Thinking § Scientific Methodology § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence <ul style="list-style-type: none"> § Written Communication § Oral Communication § Teamwork & Conflict Management § Intercultural Insight & Ability to Change Perspective Self-Competence <ul style="list-style-type: none"> § Self-Management & Self-Reflection § Ethical & Social Responsibility § Learning & Change 		
Module Learning Objectives	<p>Students...</p> <ul style="list-style-type: none"> § are able to identify possible use cases for blockchain technology and to explain its business value. § understand the principles of blockchain technology. 		

	§ know the Swiss blockchain ecosystem and can identify new developments in the area. § learn to analyze the opportunities of blockchain technology within a team. § gain some first hands-on experience with blockchain technology. § expand their critical thinking and the ability to develop "creative solutions." § gain an understanding of a possible future economic system based on decentralization.		
Module Content	§ High-Level Introduction to Blockchain I § High-Level Introduction to Blockchain II § New Economic Order § Business Cases I § Transaction & Consensus § Smart Contracts § Permissioned Blockchains § Business Cases II § Economic Incentives/Governance § Swiss Blockchain Ecosystem § Future Applications of Blockchain § Advanced Concepts		
Links to other modules	-		
Methods of Instruction	§ Lecture § Application Tasks § Exercises § Problem-Oriented Teaching § Project Work	Social Settings Used: § Individual Work § Group Work	
Digital Resources	§ Teaching Videos § Teaching Materials § Practice and Application Exercises (with Key)		
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
Performance Assessment			
End-of-module exam	Form	Length (min.)	Weighting
-	-	-	-
Permitted Resources	-		
Others	Assessment	Length (min.)	Weighting
Written Assignment	Grade	-	30.00 %
Written Assignment	Pass/Fail	-	-
Written Assignment	Grade	-	50.00 %
Talk/oral presentation	Grade	20	20.00 %
Classroom Attendance Requirement	100% attendance for didactic reasons during lessons in Week 13 & Week 14. In the case of an excused absence, a substitute assignment will be defined by the module coordinator. Unauthorized absences or an insufficient substitute assignment will result in a fail grade being awarded for the module.		
Language of Instruction/Examination	English		
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. (2017). Mastering Bitcoin - Programming the Open Blockchain. 2nd edition. Sebastopol, CA 95472: O'Reilly. ISBN 978-1491954386. § 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.		
Comments	-		