Zurich University
of Applied Sciences

School of
Management and Law

2019.HS

Module Name: Mixed Reality		
Module Code	w.BA.XX.2MR.XX	
Module Description	In this module, students become familiar with the basic theory of virtual and augmented reality. For four semester weeks, they are able to use a mixed reality lab where they can apply the knowledge they have acquired by working on a small project with Unity and an HTC Vive device.	
Program and Specialization	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	**Module Type:** Compulsory Elective	**Program Phase:** Main Study Period
ECTS	3	
Organizational Unit	W Institut für Wirtschaftsinformatik Ltg	
Module Coordinator	Thomas Keller (kell)	
Deputy Module Coordinator	Roger Seiler (seir)	
Prerequisite Knowledge	Knowledge of business information technology Knowledge of a programming language, ideally C#	
Contribution to Program Learning Goals (Affected by 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 § Work Methods, Techniques, and Procedures § Information Literacy § Creativity & Innovation Social Competence § Written Communication § Oral Communication § Teamwork & Conflict Management Self-Competence § Self-Management & Self-Reflection § Learning & Change	
Module Learning Objectives	Students... § understand the basic concepts of mixed reality § are able to apply what they learn in working on a project	
Module Content	§ Introduction § Perception § VR Worlds § VR Inputs and Outputs § Interaction § Augmented Reality § VR/AR in Education	
Links to other modules	-	
Methods of Instruction	§ Lecture § Interactive Instruction § Application Tasks § Exercises § Project Work	**Social Settings Used:** Individual Work
Digital Resources	§ Teaching Videos § Practice and Application Exercises (with Key)	

Type of Instruction	Classroom Instruction	Guided Self-Study	Autonomous Self-Study
Large Class	32 h	58 h	
Small Class	-	-	
Group Instruction	-	-	
Practical Work	-	-	
Seminar	-	-	
Total	**32 h**	**58 h**	**0 h**

Performance Assessment

End-of-module exam	Form	Length (min.)	Weighting
Written exam	Open book	60	100,00 %
Permitted Resources	Free choice of calculator	With dictionary	

Others	Assessment	Length (min.)	Weighting
Written Assignment	Pass/Fail	-	-

Classroom Attendance Requirement	Attendance requirements will be specified in the first semester week (SW). Attendance will most probably be mandatory in SWs 7-10.
Language of Instruction/Examination	German
Compulsory Reading	§ Döner, R., Broll, W. & Grimm, P. (2013). Virtual und Augmented Reality (VR/AR). Heidelberg: Springer Vieweg. ISBN 978-3-642-28903-3. § Liu, D., Dede, C. & Huang, R. (2017). Virtual, augmented and mixed Realities in Education. Singapore: Springer. ISBN 978-981-10-5490-7.
Recommended Reading	-
Comments	A laptop on which Unity has been installed will be necessary to work on the project assignment.