Valid for 2022-23-24.HS



Module Name: Applied Research Methods						
Module Code	n.MA.RE.ARM.22HS					
Module Description	The module predominantly addresses qualitative and quantitative sociological research methods with the aim of applying them to specific issues and problems in the fields of restate and facility management. The students are provided with the fundamentals and competencies that are required for this by using practical examples.					
Programme and Specialisation	Master of Science in Real Estate & Facility Management (MSc REFM)					
Legal Framework	Academic Regulations for the Master's Programme MSc REFM dated 01.08.2024, Appendix to the Academic Regulations for the Master's Programme, first adopted on 30.08.2011					
Module Category	Module Type: Compulsory					
ECTS	5					
Organisational Unit	N Institute for Facility Management (IFM)					
Module Coordinator	Dr Clara Weber (weec)					
Deputy Module Coordinator	Dr Mario Gellrich (gell)					
Prerequisite Knowledge	Basic knowledge of statistics					
Contribution to Programme Learning	 Specialised expertise Methodological skills 					
Goals (Affected by	Interpersonal skills					
Module)	■ Self-competence					
Contribution to Programme Learning Objectives	 Specialised expertise Understanding & knowledge of theory & practice-oriented content Application, analysis, and linking of theory & practice-oriented content Evaluation of theory & practice-oriented content Methodological competence Problem solving & critical thinking Scientific methods Working methods, techniques & procedures Information literacy Creativity & innovation Social competence Written communication Oral communication Interculturalism & empathy Self-competence 					
	 Self-management & self-reflection Ethical & social responsibility Learning & transformation 					
Module Learning Objective	 Students Principles of empirical social research understand key concepts and terminology in empirical social research. understand various qualitative and quantitative research designs and methods, and their potential. have reporting skills (qualitative and quantitative research results). Qualitative methods are familiar with the general theoretical background, areas of application and possibilities of various qualitative social research methods. are familiar with the quality standards of qualitative social research. have data collection skills (interviews) as well as evaluation skills (content and thematic analysis) in qualitative social research. Can apply basic descriptive statistical and inferential statistical methods in a critical and reflective manner and check test requirements. are proficient in analysing quantitative data using the Python programming language. 					

Module Content	 Key concepts and terminology in empirical social research Research designs and their potential Approaches to qualitative data collection (e.g., interviews), data preparation (transcription and coding) and data analysis (e.g., content and thematic analysis), and reporting on the collected data Approaches to quantitative data collection (web scraping, web APIs) and data preparation (importing, cleaning, organizing and enriching data in Python and working with SQL databases). Approaches to quantitative data analysis: Graphical and non-graphical exploratory data analysis (EDA) Representation and analysis of geographical data Statistical hypothesis tests (paired and unpaired T-tests, analysis of variance (ANOVA), analysis of contingency tables, correlation analysis) Multivariate data analysis and predictive modelling (simple and multiple linear regression) Presentation of quantitative results (e.g., APA) The content of this module is linked to the following modules: Real Estate Modelling and Forecasting 					
Methods of Instruction	Master's Thesis Lecture Interactive instruction Application tasks Case studies Exercises Research-based learnin Literature review	Social Settings Used				
Digital Resources	 Script / reader Teaching videos Practice and application exercises (with answers) Case studies (with answers) Livestream lectures (possibly) Statistics software 					
Type of Instruction	Classroom Instruction	Guided Self-Stu	ldy	Autono	mous Self-Study	
Lecture	40 h		-			
Practical work	-		12 h			
Project work	_		-			
Seminar						
	-		-		00.1	
lotal	40 n		12 N		98 h	
Double teaching may occur. I	Jouble teaching is not includ	led in the time pla	anning.			
Performance Assessment For performance assessments during the semester, resubmission, respectively repeat exam, is offered in accordance with § 12 and § 12a of the study regulations for the Master's degree programme in Real Estate & Facility Management at the Zurich University of Applied Sciences. Resubmission or repeat exams are not offered for end-of-module exams.						
End-of-module exam	Form		Length (min	.)	Weighting	
1 Exam	Written individual work mu	Itinle-choice-	60 minutes	-7	35%	
(quantitative)	single-answer exam		00 111110103		0070	
Permitted resources	-		-		1	
			I			
Others	Assassment		Longth (min	1	Woighting	
			Length (mm	•/	Oracianti	
2. Group work	vvritten group work		-		Group WORK	
					(quanilialive) =15%	
3. Group Work	1					
(qualitative)						
					(qualitative) =50%	
Classroom Attendance					(qualitative) =50%	
Classroom Allendance	Mandatory attendance: nor	ne but recommen	ded.		(qualitative) =50%	
Requirement	Mandatory attendance: nor	ne but recommen	ded.		(qualitative) =50%	
Requirement Language of Instruction/Examination	Mandatory attendance: nor English. For students from can be held in German.	ne but recommen other German-lar	ded. nguage study p	programn	(qualitative) =50%	
Requirement Language of Instruction/Examination Compulsory Reading	 Mandatory attendance: noi English. For students from can be held in German. Principles of empirical soci. Berg, B., & Lune, H. (20 Pearson. Blaikie, N. (2010). Designation (2013). Justice (2013	ne but recommen other German-lar al research and q 012). Qualitative r gning social resea A Step-by-Step Ir ss, CA: SAGE Pul ued in class or ma	ded. nguage study p ualitative meth research metho arch. The Logio ntroduction to S blications Ltd. ade available c	orogramn ods: ods for so c of Antic Statistics on the Mc	(qualitative) =50%	
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Requirement Language of Instruction/Examination Compulsory Reading Recommended Reading Commented	Mandatory attendance: nor English. For students from can be held in German. Principles of empirical soci Berg, B., & Lune, H. (20 Pearson. Blaikie, N. (2010). Desi Quantitative methods: Landers, R. N. (2013). <i>J</i> edition). Thousand Oak Note: The literature issu is compulsory reading. See the provided reading li	ne but recommen other German-lar al research and q 012). Qualitative r gning social resea A Step-by-Step Ir is, CA: SAGE Pul ued in class or ma st	ded. nguage study p ualitative meth research metho arch. The Logio atroduction to S blications Ltd. ade available c	orogramn ods: ods for so c of Antic Statistics on the Mo	(qualitative) =50%	