Zurich University
of Applied Sciences

School of
Management and Law

Valid for 2024.FS

Module Name: Technology Assessment	
Module Code	w.MA.XX.TEAS.23HS
Module Description	Students will learn to analyze and assess technologies, products, and materials regarding their impact on the environment and society from different perspectives and from the macro to the micro level. The instruments for assessing the circular economy are also taught. This provides students with the means to develop solutions and strategies and make decisions for the circular economy on various levels: for example, by improving products, defining standards, identifying gaps and optimization potential, and categorizing products and services (labelling). They will be enabled to derive multi-level and multi-perspective conclusions for the circular economy.
Program and Specialization	Circular Economy Management
Legal Framework	Academic Regulations MSc in Circular Economy Management dated 02.06.2022, Appendix to the Academic Regulations for the degree program in Circular Economy Management, first adopted on 23.09.2022
Module Category	**Module Type:** Compulsory Elective
ECTS	6
Organizational Unit	W Center for Corporate Responsibility CCR
Module Coordinator	Corinna Baumgartner (bamo)
Deputy Module Coordinator	Thorsten Busch (buth)
Prerequisite Knowledge	• Life cycle assessment • Assessment methods and forecasting
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 § 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
Module Learning Objectives	Students... § systematically analyze and structure a given problem and use various methods of analysis for this purpose (material flow analysis, risk assessment, human rights impact assessment, circularity assessment, etc.). § apply the methodological knowledge they have acquired to case studies. § are able to recognize a broad spectrum of actions and their consequences. § are able to carry out an effective technology assessment using appropriate tools. § are able to apply various assessment methodologies and know their differences. § are able to recommend the best possible course of action. § can draw correct conclusions from the data, interpret the results of analyses, compare them with other technologies, and explain the differences.

Module Content	§ Technology assessment: definition and goals. § The basics of technological, product, and material developments. § Understanding the socio-economic framework. § Ethical and societal foundations of technical developments. § Developments and their repercussions on society. § Different assessment methods and forecasts (risk, ethics, material flow, circularity, costs, resilience, sustainability, MCDA, etc.). § Tools and their application to practical topics. § Evaluation and communication of results.
Links to other modules	The content of this module is linked to the following modules: w.MA.XX.BUPAST.23HS
	w.MA.XX.CTH.23HS
	w.MA.XX.LCSA.23HS
	w.MA.XX.REEWAM.23HS
	w.MA.XX.SYPA.23HS

Methods of Instruction	§ Lecture § Interactive Instruction § Application Tasks § Case Studies § Project Work	**Social Settings Used:** Group Work
Digital Resources	§ Teaching Materials § Case Studies (with Key)	

Type of Instruction	**Classroom Instruction**	**Guided Self-Study**	**Autonomous Self-Study**
Lecture	46 h	-	
Excercise	-	-	
Project Work	-	10 h	
Seminar	-	-	
Total	**46 h**	**10 h**	**124 h**

Performance Assessment

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

Others	**Assessment**	**Length (min.)**	**Weighting**
Talk/oral presentation	Grade	20	20,00 %
Written Assignment	Grade	-	80,00 %

Students are not allowed to revise and resubmit performance assessment tasks.

Classroom Attendance Requirement	Mandatory Attendance: 75%
Language of Instruction/Examination	English
Compulsory Reading	-
Recommended Reading	-
Comments	-