

Valid for 2024.FS

<b>Module Name: Design</b>	
Module Code	w.MA.XX.DES.23HS
Module Description	This module highlights the importance of the design of goods for the circular economy. Design is one of the key factors in the creation of circular systems. Parameters such as material, performance, and lifespan are considered from different perspectives. The goal is not to design goods with an ecological footprint and a small improvement, but to design goods according to the cradle-to-cradle principle. Completely new designs must therefore be considered and developed. The development of circular products goes hand in hand with the design of a circular business model. And of course, circular products must also meet market requirements and customer needs.
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	<b>Module Type:</b> Compulsory
ECTS	3
Organizational Unit	W Center for Corporate Responsibility CCR
Module Coordinator	Salome Berger (begr)
Deputy Module Coordinator	Jens Baier (bajj)
Prerequisite Knowledge	A general understanding of design principles and recycling in technical and natural cycles.
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... § will explore and understand the cradle-to-cradle design. § will critically analyze common design principles. § will know and apply sustainable product and material analysis concepts. § will know and apply lifecycle analysis concepts.
Module Content	§ Design-thinking methods § Design frameworks and methods for sustainability § Materials for cradle-to-cradle products § Design measures for closing the loop § Performance and lifetime of goods
Links to other modules	The content of this module is linked to the following modules: w.MA.XX.LCSA.23HS w.MA.XX.MES.23HS w.MA.XX.SSEC.23HS

Methods of Instruction	§ Lecture § Interactive Instruction § Application Tasks § Case Studies § Exercises § Project Work	<b>Social Settings Used:</b> Group Work		
Digital Resources	Teaching Materials			
Type of Instruction	<b>Classroom Instruction</b>	<b>Guided Self-Study</b>	<b>Autonomous Self-Study</b>	
Lecture	28 h	-		
Excercise	-	-		
Project Work	-	8 h		
Seminar	-	-		
<b>Total</b>	<b>28 h</b>	<b>8 h</b>	<b>54 h</b>	
Performance Assessment				
<b>End-of-module exam</b>	<b>Form</b>	<b>Length (min.)</b>	<b>Weighting</b>	
Written exam	Closed book	90	60,00 %	
<b>Permitted Resources</b>	No calculator	With dictionary		
<b>Others</b>	<b>Assessment</b>	<b>Length (min.)</b>	<b>Weighting</b>	
Case study	Grade	-	40,00 %	
Students are not allowed to revise and resubmit performance assessment tasks.				
Classroom Attendance Requirement	Mandatory Attendance: None  Students are requested to be present during workshops.			
Language of Instruction/Examination	English			
Compulsory Reading	-			
Recommended Reading	§ Bakker, C., van Hinte, E. & Zijlstra, Y. Design for Sustainability Survival Guide. ISBN 97 890 6369 639 9. § Peters, S. Materialrevolution. ISBN 978-3-0346-0663-9.			
Comments	-			