



Module Title	Circular Cities
Code	MCCf163
Degree Programme	Master of Science – Circular Innovation and Sustainability
ECTS Credits	3
Workload	90 hours <ul style="list-style-type: none"> • 14 hours contact teaching • 72 hours self-study • 4 hours excursion
Module Coordinator	Name: Prof. Dr. Joachim Huber Phone: +41 (0) 34 426 41 09 Email: joachim.huber@bfh.ch Address: BFH-AHB - Institute SAK, Urban Transformation Aarbergstrasse 112, 2502 Biel-Bienne
Lecturers	<ul style="list-style-type: none"> • Prof. Dr. Dieter Schnell; AHB • Prof. Daniel Baur; AHB • Prof. Dr. Tobias Fritschi; S • Prof. Simone Gäumann; S • Dr. Moritz Gubler; PH Bern, Uni. Bern
Entry Requirements	Prerequisite: <ul style="list-style-type: none"> • MCCf013 Introduction to Circular Economy and Scientific Literature • MCCf026 Bridging Technology
Competencies upon Completion	<p>Competencies</p> <p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> • generate and develop own project ideas for circular city development; • judge, assess, and evaluate circular city development projects; • collaborate in a transdisciplinary manner with experts and stakeholders from different professions and fields in circular city development project. <p>Outcomes</p> <p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> • apply the basic principles and analysis of the existing urban building stock, social space, and the public realm; • investigate, identify, and describe the present and future drivers for a circular city and its infrastructure; • outline the circular architecture processes and best practices, with emphasis on reuse and urban mining; • distinguish the roles of the different stakeholders and experts of a circular city process and define their own transdisciplinary role within the project.

Content	<p>Cities with their infrastructure, including the urbanized landscape and the "in-between city", form the context and drivers of any sustainable and resilient circular economy and society in transition and vice versa. The challenges of global urban megatrends require sustainable circular innovation. Using the "city of short distances" as an example, the circular interdependencies and open problems are examined based on the stock (inventory), social space, building culture and infrastructure of a European city (such as Bern).</p> <p>Based on the circular analysis of an existing urban neighbourhood, the students define an innovative intervention project to improve quality of life according to the principles of a "city of short distances" and circular economy.</p> <p>Topics covered are:</p> <ul style="list-style-type: none"> • The circular city • Circular city and circular social design • R-cascade, the built environment, and the city • The city of short distances: 15 min. City/Barcelona Superblock
Teaching and Learning Methods	<p>The module puts circular city interventions at the core of its learnings. Throughout the project, problems are investigated, discussed, and interventions are developed, analysed, and represented. Students can include the results directly into their individual cases.</p> <ul style="list-style-type: none"> • Project/Problem-Based Learning • Case studies • Flipped classroom • Individual and group exercises • Excursion • Learning videos
Competency Assessment	<ul style="list-style-type: none"> • Written individual journal (research diary) reflecting on given questions and learnings (40%) • Group work report (40%) • Group moderation of project presentation & discussion summary, individually graded (20%) <p>Students who receive an insufficient overall grade of 3.5, are given the opportunity to carry out a <i>subsequent improvement</i> of written assignments defined by the module coordinator. The maximum overall grade that can then be obtained is 4. This still counts as the first attempt.</p>
Mode of Repetition	<p>Should a student fail the module, they have one more attempt.</p> <p>They may either:</p> <ul style="list-style-type: none"> • Submit a new assignment (100%), defined by the <i>Module Coordinator</i>, for the next resit examination session. • Repeat the full module next time it is offered.
Format	<p>2 lessons per week over 7 weeks and 1 excursion</p> <ul style="list-style-type: none"> • First lesson : expert input • Second lesson: group work, discussion, and assessment
Attendance	<p>Not mandatory, but strongly recommended, including for the excursion.</p>
Module Type	<p>Compulsory-Elective</p>
Timing of the Module	<p>Autumn Semester, Calendar Weeks 38 to 44</p>
Venue	<p>Onsite Brückenstrasse 73, 3005 Bern</p>

Literature	Literature will be provided before the start of the module via Moodle.
Language	English
Links to Other Modules	<ul style="list-style-type: none">• MCCf143 Pathways to Net Zero GHG Emissions in the Mobility Sector• MCCf223 Circular Supply Chains• MCCf243 Digitalisation and Sustainability• MCCf323 Society and Environment• MCCf443 Impact Assessment• MCCf453 Circular Design
Last Update	June 2024