

NATURAL SCIENCES (required language level B2) MASTER LEVEL Master of Technology of Circular Economy	Description	Lecturer	CP / ECTS	Term
LECTURE: Recovery of Recyclable Materials	The students learn about processes for recovering valuable materials from industrial and other material streams as well as the application and optimization of these processes. In the form of a project, the students deepen what they have learned using an example process.	Mr. Hüppmeier	6	fall
LECTURE: Water Reuse	Module description will follow soon	Mr. Illing	6	fall
LECTURE: Soil Remediation	Students receive information about typical chemical contamination of soil at contaminated sites (e.g. PAHs, heavy metals, mineral oils) and how to remediate these contaminations. Soil samples are taken from former industrial sites, analyzed and evaluated.	Mr. Walker	6	fall
LECTURE: Energies and Materials in Biotechnology	This course introduces students to biotechnological processes, with particular emphasis on the use of material and energy sources. While projects are primarily conducted on a theoretical basis, selected laboratory excursions and practical demonstrations involving yeast, bacteria and mammalian cells are integrated to enhance conceptual understanding.	Mr. de Vries	6	fall
LECTURE: Solid Waste and Recycling	Module description will follow soon	Mr. Habermann	6	spring
LECTURE + LAB: Biopolymers	The module consists of a lecture and a lab course. Students will learn to prepare, process and analyse biopolymers and understand their role in polymer industry.	Mr. Rüschen gen. Klaas	6	spring
LECTURE: Biodegradability and Environmental Impact Limited number of participants: max. 2 students	The module consists of a lecture on "Environmental Assessments" (EIA, EA, ESIA) and social & environmental responsibilities and a seminar in which independent topics on "Biodegradability" of various components are developed and presented	Mrs. Gallert	6	spring
LECTURE Introduction to Circular Economy	Module description will follow soon	Mr. Steinigeweg	6	spring
PROJECT: Circular Economy Project	Students are working in small groups on an interdisciplinary project in the field of Circular Economy Technology.	all lecturers	6	spring
LECTURE: Soft skills	Module description will follow soon	all lecturers	5	fall and spring