

NATURAL SCIENCES (required language level B2) MASTER LEVEL Master of 'Applied Life Sciences' and 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: Site Remediation	Students receive information about typical chemical contamination of soil at industrial contaminated sites (e.g. PAHs, heavy metals, mineral oils). Soil samples are taken from former industrial sites, analyzed and evaluated		Mr. Walker	6	fall
LECTURE: Energies and Materials in Biotechnology	Students receive information about biotechnological process with focus on the used material and energy sources. Projects and/or practical work with yeast and bacteria will be done in a lab environment.		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. 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 Environmental Ethics and a seminar in which independent topics on the 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
LECTURE: Soil Remediation	Module description will follow soon		Mr Walker	5	fall
LECTURE: Modelling and Simulation	Introduction to the fields of scientific computing, modelling and simulation, programming with Matlab/Octave, implementation of numerical models from the fields of natural sciences and technology.		Mr. Herráez	5	spring