Modulbezeichnung	Solid Waste and Recycling
Semester (Häufigkeit)	WPM (nach Bedarf)
ECTS-Punkte (Dauer)	6 (1 Semester)
Art	Wahlpflichtmodul
Sprache(n)	English
Studentische Arbeitsbelastung	60 h Kontaktzeit + 120 h Selbststudium
Voraussetzungen (laut MPO)	N/A
Empf. Voraussetzungen	N/A
Verwendbarkeit	MTCE
Prüfungsart und -dauer	Written exam 1,0 h or oral exam and project draft (15 - 20 pages) (academic assessment)
Lehr- und Lernmethoden	Lecture and project
Modulverantwortliche(r)	R. Habermann

Qualifikationsziele
After completing the module, students will be able to ...

- identify the legal framework for the treatment of solid waste and to implement it in action measures.
- analyze and synthesize the concepts of waste collection
- record the function of selected plant components for waste processing, delimit their areas of application and develop plant concepts for the processing of solid waste

by ...

- analysing the relevant legal framework and working out requirements on the recycling procedure
- designing concepts for solid waste collection
- drafting a rough plant design for solid waste recycling of a study case

in order to ...

- analyse existing recycling plants for debottlenecking and optimisation
- determine approximate capacity expansions of plant sections
- describe the qualitative and quantitative requirements of a recycling plant in communication with a recaycling plant manufacturer

Lehrinhalte
Terms and definitons of legal framework for solid waste recycling, concepts for solid waste collection, fundamentals of preapration and sorting of solid multi-component waste, machines and apparatus for solid waste recycling, procedural plant concepts and economic aspects.

Literatur
Lecture manuscript and supplementary material
Technical literature
G. Tchobanoglous, F. Kreith: Handbook of Solid Waste Management, McGraw-Hill, New York, 2002

Lehrveranstaltungen

Dozenten/-innen	Titel der Lehrveranstaltung	SWS
R. Habermann	Lecture Solid Waste and Recycling	2
R. Habermann	Project Solid Waste and Recycling	2