Data:	Examination number: -	Version: 15.11.2017	Start Year: WiSe 2019
Module Name:	**Project - Process Design Mineral Processing / Recycling**		
(English):			
Responsible:	Peuker, Urs Alexander / Prof. Dr.-Ing.		
Lecturer(s):	Mitarbeiter des Institutes MVT/AT		
Institute(s):	Institute of Mechanical Process Engineering and Mineral Processing		
Duration:	1 Semester(s)		
Competencies:	The project work aims at the dimensioning of a mineral processing plant. On the basis of lab scale test (e.g. Bond grindability) the students work out a basic engineering of a processing plant of a given ore type / recycling question. The students learn to select the right lab scale tests, which provide the material and process data to quantify the individual processing steps. They learn the balancing of the material flows as well as of the auxiliary streams (e.g. process water).		
Contents:	Seminar: • Introduction into basic engineering • Plant layout • Example of a case study • Selection of lab scale tests / using standard parameters (e.g. VDI guidelines) • Documentation Project: • Selection of lab tests • Lab work: determination of individual parameters • Definition of interface between process steps • Selection of apparatus / dimensioning of process step • Presentation of flow sheet.		
Literature:	selected papers and textbook chapters for individual project topic (to be announced in the first week) VDI guidelines and international standards		
Types of Teaching:	S1 (WS): process design mineral processing / recycling / Seminar (2 SWS) S1 (WS): project process design mineral processing / recycling / Practical Application (8 SWS)		
Pre-requisites:	**Recommendations:** Conception of Process Equipment, 2017-08-21 Training in Particle Technology, 2017-08-21		
Frequency:	yearly in the winter semester		
Requirements for Credit Points:	For the award of credit points it is necessary to pass the module exam. The module exam contains: AP*: Report (basic Engineering - process layout and applied engineering tools) AP*: Presentation (determination of key parameters using engineering tools) AP*: Presentation (process layout) * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.		
	Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: Bericht (Protokoll der genutzten ingenieurtechnischen Methoden) AP*: Präsentation (Bestimmung von auslegungsrelevanten		

	Prozessparametern) AP*: Präsentation (Prozessauslegung) * Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.
Credit Points:	8
Grade:	The Grade is generated from the examination result(s) with the following weights (w): AP*: Report (basic Engineering - process layout and applied engineering tools) [w: 2] AP*: Presentation (determination of key parameters using engineering tools) [w: 1] AP*: Presentation (process layout) [w: 1] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.
Workload:	The workload is 240h. It is the result of 150h attendance and 90h self-studies.