

Module title		Abbreviation
Polymer Materials 2: Technology of Filler Modification for Polymer Materials		o8-FU-PW2-161-mo1
Module coordinator		Module offered by
degree programme coordinator Funktionswerkstoffe (Functional Materials)		Chair of Chemical Technology of Material Synthesis
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	graduate	--
Contents		
Principles of and technologies for the functionalisation of filler materials in order to modify polymers, interactions between filler materials and polymers, determination of the special properties of functionalised polymers (e.g. electrical behaviour, bactericidal behaviour) and influence of functionalisation on other properties (e.g. rheology, mechanical behaviour, colour, surface).		
Intended learning outcomes		
Students have become familiar with technologies for the functionalisation of filler materials. They have developed an awareness of the possibilities and problems associated with the modification of polymers as well as the interactions between filler materials and polymers. They know how to determine the special properties of functionalised polymers (e.g. electrical behaviour, bactericidal behaviour) and understand how other properties are influenced by functionalisation (e.g. rheology, mechanical behaviour, colour, surface).		
Courses (type, number of weekly contact hours, language – if other than German)		
V (2) + P (2)		
Method of assessment (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
a) written examination (approx. 90 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes per candidate) Language of assessment: German and/or English Assessment offered: Once a year, summer semester P: creditable for bonus		
Allocation of places		
--		
Additional information		
--		
Workload		
150 h		
Teaching cycle		
--		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
--		
Module appears in		
Master's degree (1 major) Functional Materials (2016) Master's degree (1 major) Functional Materials (2022)		