

Module title		Abbreviation
Tissue cells meet materials		03-GEWMAT-222-m01
Module coordinator		Module offered by
holder of the Chair of Tissue Engineering and Regenerative Medicine		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	--	--
Contents		
The module teaches the following contents: The cell culture techniques required for the construction of artificial tissues (tissue or also bioengineering), the basics of constructing such models using suitable (bio)materials, the use of such models as alternative test systems to animal experimentation. Another topic is the development of cell-based transplants, medical devices and drugs, as well as the regulatory basis for their approval (REACH, GLP, GMP, etc.).		
Intended learning outcomes		
Students will gain content-related and methodological insights into current key topics in tissue engineering as well as the use of these tissues as substitutes for animal models or as transplants in regenerative medicine.		
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) placement report / fieldwork report / report on practical training / report on practical course / project report / report on technical course (approx. 10 pages) and b) presentation (approx. 30 minutes) or written examination (approx. 90 minutes) Language of assessment: German and/or English		
Allocation of places		
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Additional information		
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Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Master's degree (1 major) Functional Materials (2022) Master's degree (1 major) Biofabrication (2025) Master's degree (1 major) Functional Materials (2025)		