

M 6.4: Spatial Analysis in Sustainable Planning (SASP)

Module coordinator:	Prof. Dr. Jürgen Knies		
ECTS credit points:	6 ECTS	Total workload:	180h
Use of the module in this degree programme:	Compulsory elective module in the 6. semester	Of which face-to-face studies:	56h
Duration and frequency of the programme:	14 Sessions in the summer term	Of which self-study:	124h
Use of the module in other degree programmes or academic continuing education courses further education programmes:	none		
Learning outcomes:			
<p>Knowledge and understanding (broadening knowledge, deepening knowledge, understanding knowledge)</p> <ul style="list-style-type: none"> ▪ <i>Students are able to transfer environmental and energy technology issues into a spatial context.</i> ▪ <i>Students recognise, describe and research relevant geodata.</i> <p>Use, application and generation of knowledge (utilisation and transfer, scientific innovation)</p> <ul style="list-style-type: none"> ▪ <i>Students analyse environmental and energy infrastructures, taking into account different spatial and temporal scales.</i> ▪ <i>Students are able to assess the quality of the data basis and critically scrutinise the analysis results.</i> ▪ <i>The students design map- and data-supported lines of argumentation (story maps)</i> <p>Communication and co-operation</p> <ul style="list-style-type: none"> ▪ <i>Students develop different visualisation approaches in order to be able to communicate thematic objectives in a target group-specific way.</i> <p>Scientific self-image or professionalism</p> <ul style="list-style-type: none"> ▪ <i>Students face the challenge that analysing the spatial reference can change the requirements for environmental and energy technology concepts.</i> ▪ <i>Students learn to deal critically with data and to assess the possibilities and limitations of models.</i> 			
Teaching content:			
<ul style="list-style-type: none"> ▪ <i>Formulation of environmental and energy-related questions, with the help of which the relevant geodata and analysis approaches are worked out.</i> ▪ <i>Fundamentals of geodata and geoanalysis</i> ▪ <i>Modelling of environmental and energy infrastructures</i> ▪ <i>Creation of a data- and map-based portfolio (story map) for the purpose of communicating the solution approaches</i> ▪ <i>Methods for critical assessment of data and results</i> 			
Language of instruction:	English		
Participation requirements:	--		
Preparation/literature:	<i>Current literature lists are issued at the beginning of the semester.</i>		
Further information:	<i>Course registration on AULIS required, learning materials are available on AULIS, use of eLearning methods</i>		

Associated courses

Title of the course	Teachers	SWS	Teaching and learning methods	Forms, scope and duration of examinations

Basics of geoanalysis, story map	Prof Dr Jürgen Knies	2	Seminar-based teaching	Portfolio (PF)
Digi-Lab /Application example	Prof Dr Jürgen Knies	2	Laboratory	
Module-related exercise	Prof Dr Jürgen Knies	1	Guided self-study	