Module level Master	Creditpoints 3	Language English	Return annual
Module designation Planning and Construction of Wind Farms			
Course(s) Planning and Construction of Wind Farms			
Code	**Subtitle**		
Person responsible for the module	Prof. Dr.-Ing. Detlef Kuhl		
Lecturer	Eng. Stefan Bauch, Lisa Keaton B.A.		
Workload	90h (15h online presentation, 30h private study, 45h home work)		
Relation to curriculum	Additive key skills, elective		
Type of teaching, contact hours	Skype, telephone, virtual classroom, digital communication		
Requirements according to examination regulations	None		
Recommended prerequisites	None		

Module objective / intended learning outcomes

The students are able to do a micrositing for a wind farm using all available (project-) information taking into account the site conditions, local and other restrictions. The students will get the ability to know, which influence different conditions/restrictions are during the planning process and what are the consequences. Additionally, the students know how the construction of the infrastructure of a wind farm and the erection of wind energy converters will take place.

Content

- Micrositing
  - What wind energy converter for what site
  - Basics of micrositing
- Emissions
  - Basics of micrositing
  - Noise
  - Shadow
  - Other
- restrictions during the planning Process
- Grid connection
- Construction of wind farms
  - Transport
  - Subsoil
  - Foundation
  - Site access
  - erection

Study and examination requirements and forms of examination	Written homework (15 pages) with presentation of the homework (20 min) and oral examination (10 min. The examinations are going to50% (written homework) of the shares and 20% (presentation) and 30% (oral examination) in the final grade of the module.
Media employed	online script

Reading list

Erich Hau/ Wind Turbines: Fundamentals, Technologies, Application, Economics
Erich Hau/ Windkraftanlagen: Grundlagen, Technik, Einsatz, Wirtschaftlichkeit