Curriculum

1. Semester (WiSe)

- [1] Scientific and technical writing (Faiß, Goltz)
- [2] Global wind industry & turbine technology (Faber, Schubert, Rave, Schneider, Funk)
- [3] Energy economics (Heinen)
- [4] Advanced engineering mathematics (Schlipf)
- Elective A
- Elective B

2. Semester (SuSe)

- [12] Wind turbine aerodynamics (Risius, Schlipf)
- [13] Certification, load assumptions & simulations (Manjock, Blohm)
- [14] Control and automation of wind power plants (Schütt)
- [15] Tower and rotor structures (Schedat, Böhme, Keindorf, Schiffner, Poursadrollah)
- [16] Mechanical drive train (Quell)
- [17] Electrical engineering for wind turbines (Leiße)

3. Semester (WiSe)

Mechanical engineering	Electrical engineering	Structural engineering	Project development
[19] Machinery components (Terwey)	[20] Electrical machines and power electronics (Saiju)	[22] Structures, rotor blades and civil engineering (Faber, Böhme, Previtali)	[24] Advanced wind farm planning (Nikolai)
[20] Finite elements (FE) & fatigue analysis (Terwey, Stankovic)	[21] Grid integration (Jauch, Nottrott)	[20] Finite elements (FE) & fatigue analysis (Terwey, Stankovic)	[23] Wind farm project development (Blohm)
[25] Project: Development of a wind turbine (Blohm, Faber et al.)	[25] Project: Development of a wind turbine (Blohm, Faber et al.)	[25] Project: Development of a wind turbine (Blohm, Faber et al.)	[25] Project: Development of a wind turbine (Blohm, Faber et al.)
2 Electives	2 Electives	2 Electives	2 Electives

4. Semester (SuSe)

Thesis

Electives

1. Semester (WiSe)

- [5] Mechanical engineering basics (Weychardt)
- [6] Electrical engineering basics (Saiju)
- [7] German for foreign students (Kähler)
- [8] English for engineers (Reimer)
- [9] International aspects of renewable energy (Liebing, Pfaffenberger)
- [10] Fundamentals of artificial intelligence (Neumann, John)

3. Semester (WiSe)

- [26] Wind energy planning and applied geoinformatics (Möller)
- [27] Offshore wind energy: operation and maintenance (N.N.)
- [28] Experimental and computational fluid dynamics (Risius)
- [29] Modelling & simulation of wind turbines (Jauch)
- [30] Turbine measurements (Sachse)
- [31] Controller design for wind turbines and wind farms (Schlipf)
- [32] Market integration and commercial optimisation (Heinen)