

## Schedule Power Network Planning and Operation

Location: G10-111 and online

Time: Friday, 1:15 pm to 2:45 pm

Lecturer: Prof. Dr.-Ing. habil. Martin Wolter

### Content:

- Introduction to the tasks of network planning and system operation
- Equation systems to describe steady-state and quasi-steady-state problems in electric power networks
- Grid modeling using modal component systems
- Basic algorithms of power flow, short-circuit and stability calculations as well as state estimation
- Introduction to power grid modelling with MATLAB

Nr.	Datum	Thema
1	14.10.2022	Introduction to Power System Planning and Operation
2	21.10.2022	Modal components
3	28.10.2022	Equipment modelling I
4	04.11.2022	Equipment modelling II and grid equations
5	11.11.2022	Power Flow Calculation I
6	18.11.2022	Power Flow Calculation II
7	25.11.2022	State Estimation
8	02.12.2022	Short-circuit calculation
9	09.12.2022	Transmission planning and modelling
10	16.12.2022	Stability I
11	23.12.2022	- Christmas Holiday -
12	30.12.2022	- Christmas Holiday -
13	06.01.2023	- Christmas Holiday -
14	13.01.2023	Stability II
15	20.01.2023	Seminar Power Flow Calculation
16	27.01.2023	Repetition and exam preparation