

Advanced Seminar for SES students

Date: 22.09.2025

# **Planning a resilient and sustainable electricity grid**

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## **Description:**

A sustainable and resilient electricity grid is essential for the energy transition, economic stability, and security of supply. In this group assignment, eight students will each explore a different aspect of this complex topic. The aim is to develop a common overall understanding, communicated through eight individual contributions.

Each person prepares an independent 20-minute presentation on their specific aspect. The presentations should be coordinated to avoid overlaps and create synergies. The goal is a comprehensive view: ***What is needed to successfully plan a resilient and sustainable electricity grid?***

The following topics should be analyzed during the advanced seminar:

- Grid Resilience in Distribution Networks under Extreme Weather
- Digitalization of Grids: Opportunities and Vulnerabilities
- Sector Coupling as a Resilience Strategy
- Life-Cycle Sustainability in Grid Planning
- Decentralized Resilience through Local Energy Communities
- Economic Risk Assessment of Climate and Cyber Threats
- Governance and Responsibilities in Grid Resilience
- International Case Studies on Resilient Power Systems

## **General conditions:**

- The maximum number of participants is limited to 8 students
- Registrations must be received by e-mail by 31.10.2025 by the supervisor
- A date for the kick-off event will be announced after the registration phase

## **Contact:**

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