E²-DAY

TAG DER ELEKTROTECHNIK

ABSCHLUSSARBEIT

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THEMA

Electrical Engineering Degree Curricula Analysis for Microgrids Sustainability.

FACHGEBIET

Didactics of Technology

BESCHREIBUNG

Microgrids are arguably a solution to the low levels of electrical energy access in the remote parts of developing countries. This is because of their decentralized nature coupled with scalability and stability advantages, among others. In developed countries, microgrids are used to integrate distributed generated electrical energy into distribution networks in a bid to make the latter smarter. For these advantages to be realised, there should be a competent workforce to deal with technical, operational, control and other challenges associated with the practical implementation of sustainable microgrids.

Academic institutions are a core party and ought to play a vital role in producing a competent workforce for microgrids sustainability. This study seeks to analyse electrical engineering degree curricula, from selected universities in Europe - more attention to those in German, to establish the degree to which curricula contents address sustainability and microgrids related issues.

ZIELE

The aim is to perform an empirical analysis of electrical engineering degree curricula, from selected universities in Europe, to establish the degree to which the contents address sustainability and microgrids related issues. Specifically, the study should:

1. Establish skill based competences derived from the curricula
2. Identify skill based competence gaps
3. Propose content for inclusion to bridge identified gaps.

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