



Institute of New Energy Systems (InES)

As research institution for applied energy research, the Institute of new Energy Systems (InES) forms part of Technische Hochschule Ingolstadt. At InES, five professors and more than 40 researchers are working on future-oriented technologies in the field of renewable energies and rational use of energy. They focus on industrial and domestic energy systems, energy systems technology as well as on technology transfer and international projects. Bachelor and master students will find excellent career opportunities with InES. For more details about our research activities please visit <https://www.thi.de/energie>.

**Student assistant or Bachelor/Master Thesis
Statistical analysis and evaluation of quantitative surveys in
Informal Settlements**

Research project and background:

With the aim to strengthen the resilience of African cities, the project [Sustainable Energy Education Districts for Informal Settlements \(SEED\)](#) focuses on Informal Settlements in Kenya and Mozambique. The key target is to develop a comprehensive, sustainable, off-grid, renewable energy system based concept (so called Energy-Hub) for an adequate energy supply to Informal Settlements in selected countries.

Objective of the thesis:

The aim of the work is to obtain a comprehensive analysis and evaluation of quantitative data (surveys) of households and small businesses. Survey topics include general personal, household, financial and social information, as well as energy demand, energy use behavior, available energy services, digitalization, water and waste disposal infrastructure management.

Tasks:

1. Thorough statistical analysis of quantitative data. The data basis is a survey of households and businesses in one respective Informal Settlement of Kenya and Mozambique.
2. Comparison of the two mentioned case sites (Kenya and Mozambique) with the task of identifying trends, similarities, and differences
3. Derivation of recommendations for action

Target Group:

Students of the subject areas/study courses:

- Students during their bachelor's or master's degree **with excellent skills in statistical analysis software**, like R, SPSS, Stata, Excel or similar.

Period of time:

Beginning: 01.10.2023 with a period of up to 6 months

Contact and Supervision:

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