

Performance measurements on green roofs – water and energy resources

Organization:	Green Panels (https://www.sbcsustainability.com/startups-2022/green-panels)
Location:	Enschede
Starting date:	2023
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Organization

Green Panels is a start-up company with a new concept for green roofs: affordable and easily implementable systems for sloped roofs. While prototypes are being tested in lab and real environments, performance measurements still need to be done.

Context

Green roofs have the potential to reduce the negative impacts of climate change, such as from extreme temperatures and flooding. This project aims to measure how well the newly developed green panels perform in terms of reduced energy consumption and delayed flood peaks.

Assignment in brief

Determine the performance of Green Panels in terms of reduced energy consumption/reduced extreme temperatures, and delayed flood runoff peaks/captured and transpired precipitation. Test prototypes with different materials, substrates and configurations of green roof layers. Compare the results of different test cases: laboratory vs. real life and standard model vs. model with additional layer of materials.

Requirements

The student is required to have a level of independency, analytical skills to evaluate the accuracy of results and creativity to setup small-scale experiments. Supplementary technical skills such as setting up temperature sensors, data logging software and simple mechanisms e.g. irrigation system.

Compensation

Besides being part of a promising startup and having access to the university's incubator Novel-T/Incubase, you will be part able to work with plenty of flexibility. Since you will be working on an early stage start up, the *internship is unpaid*. However, the environment will give enough freedom to conduct the research and development, allowing you to test and put into practice your skills and interests as a professional.

Details:

Duration: 3 months (10 weeks)

Working hours: 24h-32h/week. Preferably 9am-17pm

