

## WASH R&D CENTRE

Water Sanitation & Hygiene Research & Development Centre

## May 2025

## Funded MSc Research Opportunity: Incorporating Faecal Sludge into Novel Building Materials

This MSc research opportunity in Environmental and Civil Engineering focuses on developing sustainable building materials by incorporating faecal sludge recovered from the LOOWATT sanitation system. The LOOWATT system, implemented in Durban, South Africa, since 2023, is a non-sewered sanitation technology designed to improve hygiene by trapping human waste in a liner, eliminating direct contact, odors, and pathogen spread. While the system has achieved significant social acceptance, challenges remain regarding the safe and sustainable disposal of sludge and the liner.

The aim of this research project is to explore the potential of transforming faecal sludge and the liner into innovative building materials, such as concrete and clay bricks, within a circular economy framework. The research will contribute to sustainable waste management practices, promote environmental conservation, and address housing and construction material challenges.

Application Process

To apply, please submit:

- CV/Resume
- Cover Letter detailing your interest in the project and relevant experience
- Academic Transcripts

Deadline: 20th May 2025 Qualified applications will be interviewed and the start date is 2nd semester 2025.

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