UNIVERSITY OF THE FREE STATE UNIVERSITEIT VAN DIE VRYSTAAT YUNIVESITHI YA FREISTATA



Short CV

Stefaan Erasmus (MEng Mechanical)

Lecturer: Agricultural Engineering

Courses Presented

AGEG2624 - Engineering Principles in Agriculture - Undergraduate

AGEG3714 – Hydraulics – Undergraduate

AGEG3724 – Irrigation Systems and Surveying – Undergraduate

IRRI6846 - Irrigation Design - Postgraduate

Research Focus

Hydraulics, Irrigation, Renewable Energy, Energy Storage Systems, Heat Transfer, Machine Learning,

Most Recent Publications

- 1. J. Maritz et al., 2024. Data-Driven Modeling of Frequency Dynamics Observed in Operating Microgrids: A South African University Campus Case Study. IEEE Access, vol. 12, pp. 14466-14473, 2024. DOI: 10.1109/ACCESS.2024.3357945.
- Erasmus, S. and Maitz, J., 2023. A Carbon Reduction and Waste Heat Utilization Strategy for Generators in Scalable PV—Diesel Generator Campus Microgrids. Energies, 16(18), p. 6789. DOI: 10.3390/en16186749.
- 3. Erasmus, S., Esterhuysen, N. and Maritz, J., 2023. Campus Microgrids within the South African Context: A Case Study to Illustrate Unique Design, Control Challenges, and Hybrid Dispatch Strategies. Energies, 16(3), p.1519. DOI: 10.3390/en16031519.

Fun Fact

Prefers holidays in the Karoo over holidays at the seaside.

Collects interesting looking rocks.

Enjoys reading spy novels.

