

Master's Thesis Autonomous Irrigation Technology in Field Trials

Hands-on • Future-oriented • Technologically exciting

Agriculture is undergoing a profound transformation driven by climate change, resource scarcity and automation. Modern irrigation technology is a key component for efficient and sustainable crop production. This Master's thesis offers the opportunity to test and scientifically evaluate an autonomous irrigation machine under real field conditions. The system moves independently across the field using a water-powered turbine drive and irrigates via boom arms equipped with multiple nozzles. The goal is to generate reliable measurement data and practical insights into the performance of modern irrigation systems. You will work directly with real agricultural machinery, plan and conduct field trials independently, and generate high-quality data for your thesis. The combination of research and practical work provides an excellent foundation for a career in agricultural engineering, precision farming or digital agriculture. The thesis is based at the Agro-Technicum of Osnabrück University of Applied Sciences and can start from May onwards (or by arrangement). It is particularly suitable for students in agricultural engineering, agriculture, precision farming, mechanical engineering or related fields.

Apply now

Scan the QR code to send a short email expressing your interest.



Contact

Christoph Brinkmann, M.Sc.
christoph.brinkmann@hs-osnabrueck.de

Examiners:

Prof. Dr. Hubert A. Korte (HS Osnabrück)
Prof. Dr. Heinz Bernhardt (TUM)