

**Graduate Research Assistantship (Ph.D. Level)**  
**Agricultural and Biological Engineering Department**  
**University of Florida**

**Position Description:**

The Precision Water Management Lab in the Agricultural and Biological Engineering Department at the University of Florida is looking for a motivated Graduate Research Assistant (GRA; Ph.D. level) to work on the FDACS-OAWP-funded project on cover crop implementation in the maize-peanut production system. The objective of this project is to understand the impact of cover crop implementation on soil quality, nutrient cycling, soil hydraulic properties, water balance components, crop water use, crop productivity, and long-term progress. The project will also integrate a cover crop management system with in-field data, process-based simulation modeling [such as DeNitrification and DeComposition (DNDC), Decision Support System for Agrotechnology Transfer (DSSAT) etc.], and machine learning (AI/ML) algorithms to interlink crop productivity, soil health, nutrient cycling, and their impact on economic and risk management aspects on local to regional scales. The successful candidate should have relevant experience in soil and water conservation and process-based modeling. The successful candidate will be self-motivated, creative, and have a desire to collaborate in a multidisciplinary environment. The candidate will be expected to publish in peer-reviewed journals and conference publications.

**Appointment:** The GRA will work under the supervision of Dr. Vivek Sharma. The stipends, tuition, and fees for the Ph.D. program will be covered, starting Fall 2026 until December 2030 (3.5 years).

**Minimum qualifications:**

- M.S. degree in Agricultural and Biological Engineering, Soil and Water Science, Agronomy, Environmental Science, or any other related field with a GPA of 3.0 or higher.
- Strong quantitative skills, including experience with statistical software (R, SAS, Python, etc.).
- Experience in field-based crop or soil research
- Strong English writing and communication skills.
- Non-English credentials must obtain a TOEFL score of 79 iBT or IELTS score of 6.5 or higher (GRE may be waived).

**Preferred qualifications:**

- Knowledge and experience in soil health principles, process-based modelling (DNDC, DSSAT).
- Familiarity with soil physical measurements (infiltration tests, water retention curves), nutrient analyses, or laboratory instrumentation.
- Record of previous scientific communications (journal articles and/or conference publications).

**How to Apply:**

Interested applicants are encouraged to contact Dr. Vivek Sharma ([vsharma1@ufl.edu](mailto:vsharma1@ufl.edu)) directly with a cover letter, CV, research statement, and name of three references.