

PhD Assistantships in Biosystems Engineering (available Spring 2023)

Department of Environmental Engineering and Earth Sciences
School of Civil and Environmental Engineering and Earth Sciences
Clemson University, South Carolina, USA

Applications are invited for PhD assistantships in the field of biosystems engineering in the Department of Environmental Engineering and Earth Sciences, School of Civil and Environmental Engineering and Earth Sciences at Clemson University. These PhD assistantships are available starting January 2023 (Spring semester 2023). The research topic of these PhD studies focuses on soil erosion and soil loss. The main research objectives are to partially develop science components and code features of the web-based user interface for Revised Universal Soil Loss Equation 2 (RUSLE2), and to develop additional RUSLE2 technology programming. This research involves experimental, theoretical, and modeling studies, and includes laboratory and field investigations, as well as computer modeling and simulation (e.g., RUSLE2). The scope of this research project is highly interdisciplinary and integrates concepts from hydrological sciences, soil sciences, soil physics, agricultural and biological engineering, computer modeling, and physics, chemistry, and biology. This research is funded by the U.S. Department of Agriculture National Resources Conservation Service (USDA-NRCS).

Application Procedure

Candidates with a MS degree in agricultural/environmental/biosystems engineering, or a related field, are encouraged to apply. A MS degree at the start of the PhD program is required. The successful candidates are expected to show broad agricultural and biological engineering, hydrology, hydraulics, soil and water resources engineering and management, soil science, earth science, and computer modeling interests, and the ability to conduct experimental and analytical work in the field and laboratory, as well as theoretical and computer modeling studies.

The successful candidates will be motivated, curious, a problem solver, want to solve practical problems and work with both U.S. federal government departments and agencies and academic partners, and most importantly be results-driven and meet deadlines. The candidates will be expected to communicate research results via quality peer-reviewed journal articles and presentations at national and international conferences.

Interested applicants are encouraged to apply for the PhD Assistantships by sending the following materials to Dr. Christophe Darnault (cdarnau@clemson.edu): (1) a cover letter describing their motivation for the application and career objectives, (2) a brief statement of research interests, (3) curriculum vitae including laboratory and field work experiences, (4) copies of recent publications (if available), and (5) the names, email and postal addresses, and telephone numbers of three references. Inquiries regarding these PhD Assistantships should be submitted by email to Dr. Darnault. Applications will be evaluated immediately and considered until the PhD positions are filled. These PhD assistantships are available starting January 2023 (Spring semester 2023).

If selected, the students will formally apply to Clemson University Biosystems Engineering Graduate Program via the graduate school. Candidates will have to apply to the Clemson University Graduate School for admission to the PhD program in Biosystems Engineering and meet the requirements for the PhD in Biosystems Engineering.

Details about application information to Clemson University Graduate School can be found at:

<http://www.grad.clemson.edu/admission/>

Details about the Biosystems Engineering Graduate Program can be found at:

<https://www.clemson.edu/cecas/departments/eees/academics/gradprog/biosys.html/index.html>