

Funded PhD Position in Systems Engineering – BlueGreen Decisions Lab, Colorado State University

Position Overview

The BlueGreen Decisions Lab led by [Dr. Conrad](#) at Colorado State University, [Department of Systems Engineering](#) is recruiting one funded PhD position. Funded for a minimum of three years with a possibility of additional funding, the successful candidate will explore complex human-environmental systems interactions through innovative research methods using social sciences and systems engineering.

Research Focus

The selected candidate will contribute to a vibrant and unique research program that integrates social and engineering sciences to enhance decision-making and visualization. The research will specifically focus on:

1. **Water-Energy Nexus:** Detailed investigation into the system interactions between water and energy utilities within urban systems, focusing on applying systems approaches to enhance efficiency and sustainability.

Secondary research opportunities include:

2. **AI Applications:** Enhancing decision-making processes in the built environment through advanced artificial intelligence techniques.
3. **Human Dimensions:** Applying social sciences to investigate and model the human aspects of engineering and decision sciences to foster sustainable development.
4. **Sustainable Systems Engineering:** Developing solutions based on ecological resilience, nature-based solutions, and community-focused approaches.

Details

The student is required to apply to the [Systems Engineering PhD program](#). They will benefit from the dynamic and collaborative research environment provided by the [Energy Institute](#) and CSU powerhouse campus, which provides access to unique field programs and an international network of collaborators.

- **Location:** Colorado State University, Fort Collins, CO
- **Start Date:** Fall 2024 or Spring 2025
- **Application Deadline:** July 1, 2024, for Fall 2024 enrollment, November 1, 2024 for Spring 2025 enrollment

Qualifications

- A Master's degree in Systems Engineering, Civil and Environmental Engineering, Environmental Science, Electrical Engineering, or a closely related non engineering field with emphasis in human geography, systems science, mixed methods for urban systems and or human dimensions, and or environmental systems management/sustainability.
- Strong analytical and research skills with a keen interest in urban systems optimization, resilience, and sustainable engineering.
- Experience with modeling software, utility systems, and or AI tools is highly desirable.

Application Process

Interested candidates should send a CV, unofficial transcript, and statement of research interests to: Dr. Steven A Conrad (steve.conrad@colostate.edu). Review of applications is ongoing. Upon encouragement from Dr. Conrad, students would apply to the Systems Engineering Department.

