



# Sustainable Facilities Center Engineering Clinic Projects





# Sustainable Facilities Center (SFC)

- Since 2018, the SFC engages in contract work for the New Jersey Department of Military and Veterans Affairs (**NJDMAVA**) and New Jersey American Water.
- Provides funding for **graduate student positions**.
- Provides opportunities for **summer internships!**
- Gain access to SFC space (Rowan Hall Room 222) for studying.
- Check out our website [here!](#)





# Spring 2026 Clinic Projects

- Building Energy and Water Audits (**NJDMAVA**)
- Building Information Modeling (**NJDMAVA**)
- Sustainable Drinking Water (**New Jersey American Water**)
- AI Enabled Nuclear Energy Geospatial Analysis



# Building Energy and Water Audits

**Clinic Advisors:** Dr. Riddell, Dr. Trias, Dr. Haas, and Dr. Li

**Clinic Description:** Analyze building water and energy use, perform site visits to collect information, create models of energy use, and perform preliminary designs for measures to improve efficiency or generate renewable energy on site.

**Clinic Requirements:**

- Seeking ME, CEE, and ECE majors (ME students should register for ME section)
- Attend off-campus visits to NJDMAVA sites.
- Use field equipment (thermal cameras, flow bags, etc.) to collect building data.





# Building Information Modeling

**Clinic Advisors:** Dr. Trias and Dr. Riddell

**Clinic Description:** This project is a collaborative process of collecting and organizing detailed building data to create a 3D digital model that integrates design, construction, and operational information for improved decision-making and project management for NJDMAVA.

**Clinic Requirements:**

- Seeking ME, CEE, and ECE majors!
- Looking for returning students this semester.
- Learn Autodesk ReCap, Revit, AutoCAD, and Insight.





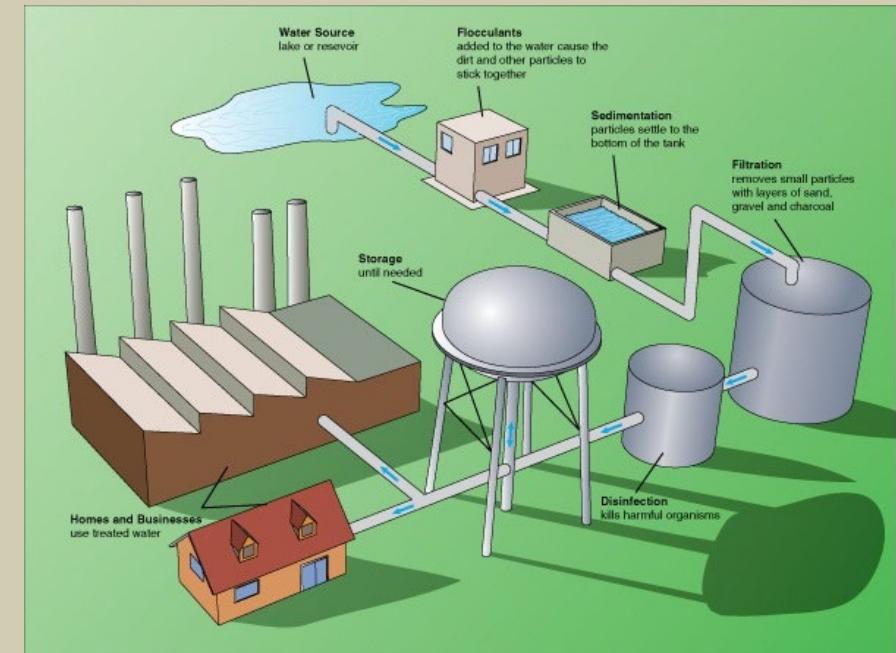
# Sustainable Drinking Water

**Clinic Advisors:** Dr. Riddell, Dr. Torlapati, Dr. Yenkie

**Clinic Description:** This project uses energy benchmarking to prioritize facilities for future energy and water audits, aligning with New Jersey Board of Public Utilities requirements, by quantifying energy use, identifying high-priority sites, recommending cost-effective measures, and supporting grant applications for New Jersey American Water.

## **Clinic Requirements:**

- Seeking CEE and ChE majors!
- Attend off-campus visits to New Jersey American Water sites.



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New for  
Spring 2026

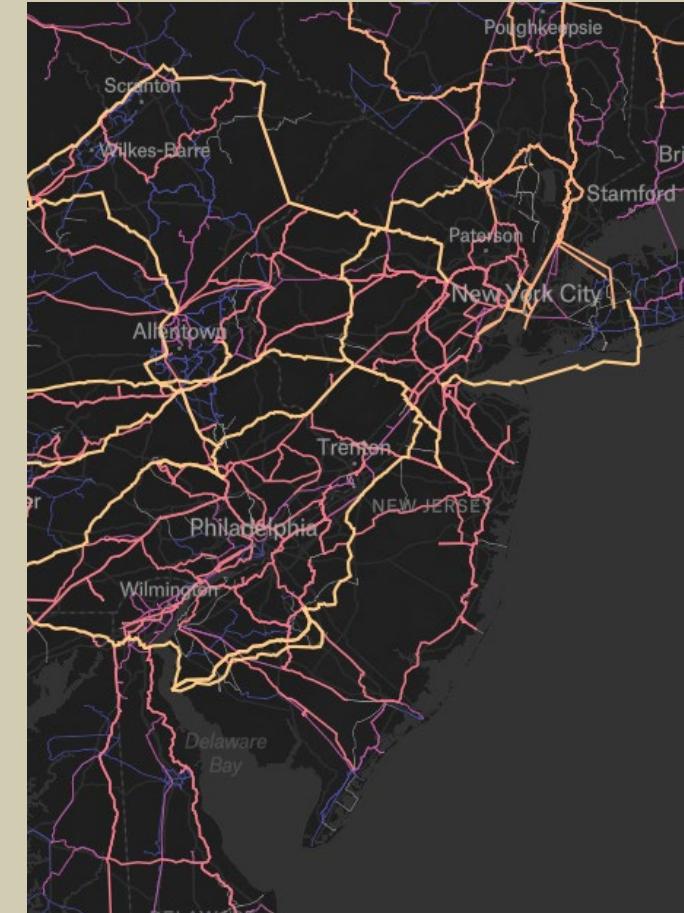
# AI-Enabled Nuclear Energy Geospatial Analysis

**Clinic Advisors:** Dr. Riddell, Dr. Mack, Dr. Peters

**Clinic Description:** Use GIS to characterize factors such as land use, access to transmission lines and access to water. Create an AI model to assess these factors and evaluate potential sites for nuclear plants. The initial analysis will be for NJ, but the methodology will be applicable throughout the country.

## **Clinic Requirements:**

- CEE majors who are (or want to be) experts at GIS and want to consider infrastructure on a large scale.
- ChE majors to identify operational requirements for plants.
- ECE majors to understand grid implications and create AI models.



Transmission lines in and  
near New Jersey



# We are excited to have you if interested!

For any questions, please reach out to the project's advisor.

