



Sustainable Facilities Center Engineering Clinic Projects

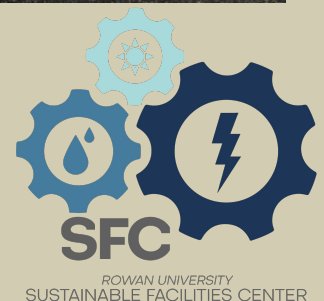




Sustainable Facilities Center (SFC)



- 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!](#)

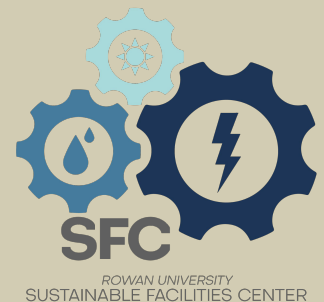




SFC Engineering Clinic Projects



- Building Energy and Water Audits (**NJDMAVA**)
- Building Information Modeling (**NJDMAVA**)
- Sustainable Facilities Management (**NJDMAVA**)
- Sustainable Drinking Water (**New Jersey American Water**)





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.





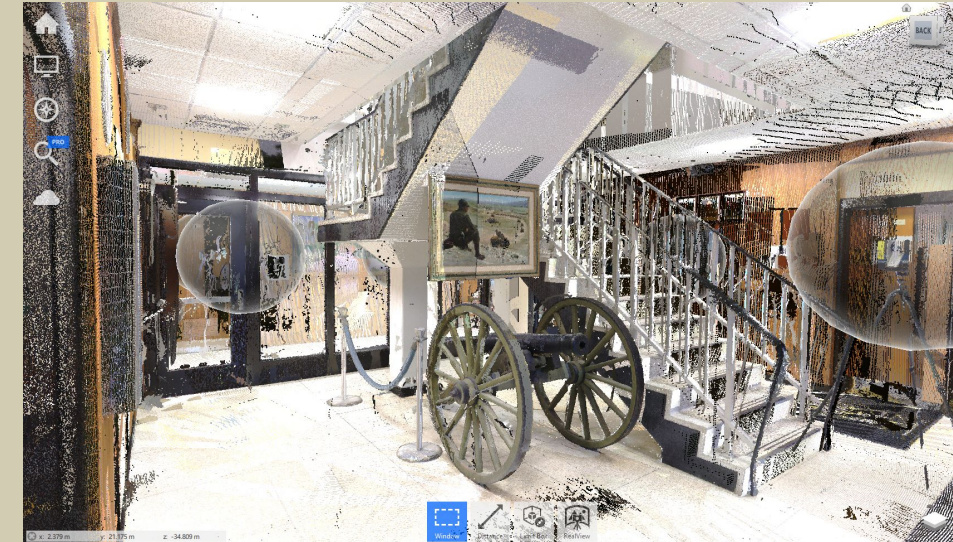
Building Information Modeling

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!
- Two-semester commitment.
- Learn Autodesk ReCap, Revit, AutoCAD, and Insight.





Sustainable Facilities Management



Clinic Advisors: Dr. Trias and Dr. Riddell

Clinic Description: This project aims to document building systems (HVAC, plumbing, and/or electrical), use advanced facility management software (BUILDER SMS and FacilityDude), to develop solutions for unique challenges at NJDMAVA facilities and create detailed preventative maintenance plans aimed to increase system lifetime for NJDMAVA.

Clinic Requirements:

- Seeking ME, CEE, and ECE majors!
- Attend off-campus visits to NJDMAVA sites.





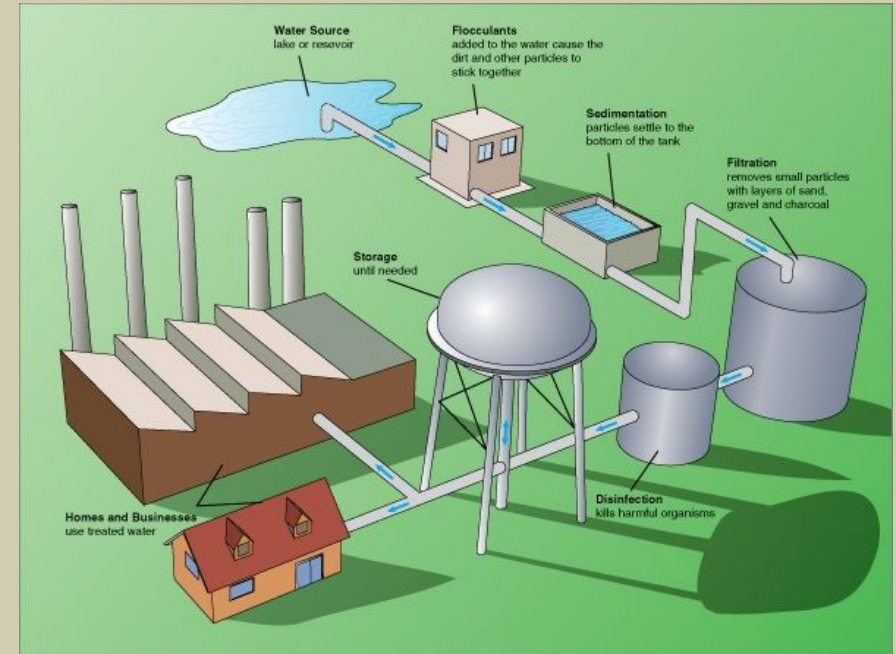
Sustainable Drinking Water

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

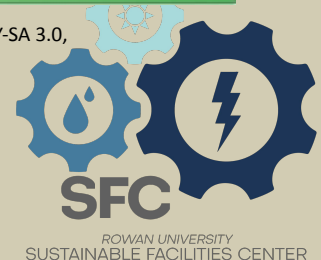
Clinic Description: This project uses energy benchmarking to prioritize facilities for future energy and water audits, aligning with New Jersey Board of Public Utilities requirements, by quantifying energy use, identifying high-priority sites, recommending cost-effective measures, and supporting grant 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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We are excited to have you if interested!

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

