



KENAN INSTITUTE

ENGINEERING, TECHNOLOGY & SCIENCE

NC STATE UNIVERSITY

2023 Climate Leaders Program Request for Applications

Pre-arranged Internship
Placement Descriptions

NC STATE UNIVERSITY

The KIETS Climate Leaders Program (CLP) has partnered with several locations to establish pre-arranged internship opportunities. As part of the CLP application process, student applicants can choose to apply for a self-proposed internship position and/or they can apply for as many of the pre-arranged placement opportunities as they wish. This document describes each of the internship opportunities pre-arranged for the 2023 CLP cohort.

Pre-arranged internship opportunities for the 2023 cohort included in this document:

- Bipartisan Policy Center
- North Carolina Coastal Federation
- Sustaera



BIPARTISAN POLICY CENTER

BPC Energy Team Internship Program

Description of work:

BPC offers paid internships during the fall, spring, and summer terms. Throughout the internship program, students get the chance to deeply engage with policy research, attend BPC and other local events, and witness policy development in the nation's capital.

Qualified candidates will be highly motivated and energetic self-starters. Interns will assist individual projects and workstreams in several capacities and should be enthusiastic about working on a variety of tasks. Interns provide administrative support, assist with events and meetings, conduct research and assist with the development and writing of blogs, white papers, reports, and other educational material. While interns work closely with their project teams, there are also opportunities to learn from and be exposed to the wide range of issues addressed by the organization.

The BPC Energy Team is focused on generating and advocating pragmatic clean energy policies through engagement with a broad set of stakeholders and experts from diverse political perspectives. We are working to forge coherent, evidence-based, and effective federal policies to responsibly drive a transition toward a cleaner low-carbon energy mix while maintaining economic growth.

Intern responsibilities:

The intern will work directly with BPC's Energy Project team on analysis and research, event planning, monitoring news and congressional activity, blog writing, communications activities, and administrative support. The intern will help support the Energy Project's major initiatives in several possible areas, including:

- Net-zero greenhouse gas policy frameworks
- Power sector and industrial sector decarbonization policies
- Energy innovation, technology development, and commercialization programs
- Policies to help advance carbon capture and storage technologies, including direct air capture
- Opportunities for natural carbon solutions
- Development of an offshore wind industry in the US
- Responsible production of natural gas and petroleum
- Energy infrastructure and permitting modernization

Qualifications:

- Strong research and writing skills
- Ability to communicate clearly and effectively
- Strong organizational skills and the ability to prioritize and manage multiple tasks
- Interns must be rising juniors or above. The Energy Team typically takes on undergrad interns, and particularly the summer internship program is geared more toward undergrad students, but we have the capacity to take on a graduate student if it's an especially strong fit

Semester timing:

Fall & Spring:

Interns are encouraged to work 18-20 hours per week in the fall and spring, and usually spend 12 weeks with BPC. Some academic programs in DC require students to work more than our suggested hours. If that is the case, we typically allow it with prior notification.

Fall applications are due by mid-July. We usually select our fall interns by mid-August, and fall internships run from the Monday after Labor Day to the Friday before Thanksgiving.

Spring applications are due November 1st. We select our spring interns by early January, and spring internships run from the Monday after MLK Day to the first Friday of May.

During the fall and spring semesters, the start/end dates for interns are flexible depending on their school/exam schedule but we encourage and prefer all interns to start and end on the same date. Start and end dates are pre-approved by their supervisor and the Recruitment and Internship Coordinator.

Summer:

Our summer interns work a full 40-hour week for 10 weeks. The summer internship period is more structured than our semester term.

In the summer the start/end dates are not as flexible, and it is strongly preferred that interns are able to start and end on the set dates. With prior notice, exceptions can be made.

Virtual or hybrid or remote:

Our Fall 2022 internship will be virtual with the option of hybrid work, and we anticipate this to be the case for internships going forward.

Stipend information:

During the fall and spring semesters, interns will receive a stipend of \$3,000. Applicants must currently be enrolled in an undergraduate or graduate program, or be a recent graduate. Fall and spring internship hours are flexible, but interns average 18-20 hours/week, allowing students to gain valuable experience while maintaining their regular class schedule.

Summer interns work full time and will receive a stipend of \$6,000 for ten weeks of work. Summer interns also have the opportunity to win an additional \$1,500 by competing for our Bennett Award, which is awarded to two BPC summer interns at the end of the summer.



North Carolina Coastal Federation

When: 5/15-23 - 8/4/23

Where: Headquarters - 3609 NC 24, Newport (Ocean), NC 28570

Who: Undergraduate and graduate students interested in protecting and enhancing coastal natural environment and water quality

About the program:

The North Carolina Coastal Federation is a member-supported nonprofit environmental organization committed to protecting and restoring the North Carolina coast. Through the Stanback Internship Program, the Coastal Federation provides several exciting opportunities for students to work with our established and successful organization. Working alongside dedicated professional staff, interns will engage in:

- Coastal policy and advocacy
- Coastal habitat protection and restoration
- Environmental education
- Community collaboration

Interns will also learn about the inner workings of nonprofit management, including public relations, strategic planning, marketing, board of directors management, communications, fundraising and nonprofit governance.

Be an integral part of our team.

Interns will spend **12 weeks** of the summer working alongside staff in our [headquarters office](#), **located in Ocean, NC** (near Newport). The exact timing of the internship is flexible, usually running from mid-May through the end of July or the first week of August. This hands-on program introduces participants to local, state and national coastal policy and management. It also provides outdoor opportunities in habitat and water quality restoration. Whether it's planting a living shoreline, bagging oyster shells for habitat or building a rain garden to reduce polluted stormwater runoff, the mix of field and research based opportunities provides a multitude of memorable experiences.

A key part of our internship includes guest presentations and site visits with local, state and federal officials; private industry; other nonprofits and academia such as three local university marine labs and a National Oceanic and Atmospheric Administration facility.

Internship Objectives

- Learn about important coastal environmental issues and the key priority goals of the Coastal Federation.
- Better understand coastal management policy and implementation at the federal, state and local levels and apply research skills to timely coastal issues.
- Learn about the roles of science, law, politics and media relations in coastal advocacy, effective public participation models and engagement strategies and apply research skills to timely coastal issues.
- Experience the natural coast and understand the Coastal Federation's protection and restoration work by engaging in a variety of field projects and site visits.
- Learn key steps for managing and operating a nonprofit (membership and board development, use of volunteers, staffing, accounting, grant writing and communications).
- Collaborate on key coastal issues to help advance the work of the Coastal Federation by working with fellow interns on group assignments.



RESEARCH INTERN

About Us:

To achieve net zero by 2050, carbon removal is imperative.

At Sustaera, we are on a mission to restore the carbon balance. We've developed a carbon dioxide removal technology that uses renewable energy to remove carbon dioxide from the air, permanently. We're a team of experienced chemical, process, mechanical, and climate engineers dedicated to bringing this technology to scale and remove 500 million tons of CO₂ by 2040.

We're backed by some of the leading climate tech investors that include Breakthrough Energy Ventures and The Grantham Foundation and have already established early partnerships with Stripe and Shopify along with being a recent winner of the XPRIZE milestone award. We've just kicked off our pilot project to capture up to 300 tons of carbon dioxide per year targeting completion in 2023.

We are looking for futurists that believe in our mission and are inspired to challenge the status quo with ingenuity and resolve. Idealists that are passionate about sustainability and on a mission to restore our carbon balance for all future generations. Come join us!

Requirements: Actively pursuing BS or MS in Chemical Engineering having completed Junior year coursework. Work on-site at Cary, North Carolina headquarters required.

Location: 5001 Weston Pkwy Suite 105, Cary, NC 27513

Timing of Internship: 3-6 months (summer/fall)

Desired Technical Skills:

- Experience with operation of cyclic catalytic, adsorption, or absorption lab systems
- Knowledge of adsorption or absorption processes for CO₂ capture



Job Responsibilities:

- Perform cyclic adsorption/desorption studies on sorbent materials to evaluate performance for use in future pilot and commercial plants
- Operate, maintain, and improve small-scale reactors and materials testing apparatuses
- Analyze results and prepare summaries to update fellow team members
- Develop software scripts to optimize data analysis
- Scope to develop new set-ups for materials testing
- Support further materials characterization efforts (XRD, BET, etc.)
- Support sorbent synthesis efforts
- Support preparation of invention disclosures and patent applications
- Collaborate with other research scientists and engineers to translate lab data into scale-up system designs

Why Join Us:

1. **We've done this before.** Our founding team has successfully built up to 5,000 ton per year carbon capture plants and completed over 30 R&D projects in the CO₂ capture space. We have a combined experience of over 125 years to learn from, and each new team member makes that foundation stronger.
2. **We have a strong network of industry, public, and private partners that enable our future.** Sustaera technology was seeded with DOE funding, and we continue to have regular collaboration at multiple levels of critical regulatory bodies. Our lead investor, Breakthrough Energy Ventures, is one of the gold standards in climate partners. The interest in our technology continues to grow monthly!
3. **We love learning from each other and learning together.** Our team is filled with folks with a wide range of experiences and expertise and no question is ever too crazy. We are passionate about learning and challenging our assumptions. Our employees grow and develop, and we create next generations of leadership.
4. **No day is the same.** As a company working on a transformational technology, every day is a new day. We adapt and move with agility to solve the challenges of the day, month, and year.
5. **We are building a product that matters.** We believe that it is possible to build a viable commercial product and healthy company that also helps the planet. These characteristics are not mutually exclusive.
6. **We love what we do.** For many employees here, this is the culmination of all their previous work and academic experiences to help solve our global emissions problem. For others, the call to climate work came more recently, and we're happy to play that role.
7. **We believe that results matter.** We hold ourselves accountable for progress and outcomes. We measure our progress toward goals, celebrate our successes, and learn from our setbacks.
8. **We believe that we will make a dent in tackling climate change.** Humanity has come together at multiple points in its history to solve incredibly daunting and complex challenges. This is the challenge of our generation, and we're up for it together.



Equal Opportunity Employer:

Sustaera an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.

COVID-19 Policy:

As a condition of employment, Sustaera will inquire about COVID-19 vaccination status, and in the event that vaccinations and masking are mandated at a work location (including client/partner locations and Sustaera locations) we expect all candidates to comply with these required safety protocols. Please note that as of March 7, 2022, Sustaera will require all staff to provide proof that they are fully vaccinated against COVID-19 in order to work at Sustaera locations. Candidates or employees who cannot get vaccinated for medical or religious reasons may be eligible for an accommodation and should notify the hiring manager upon applying if they wish to request accommodation. Requests for accommodation will be evaluated on a case-by-case basis.

Visa Sponsorship

Only candidates authorized to work in the US will be considered.

