OCEAN EXPLORATION COOPERATIVE INSTITUTE | EXPLORING THE NATION'S BLUE FRONTIER

OCEAN EXPLORATION TRUST | UNIVERSITY OF NEW HAMPSHIRE | UNIVERSITY OF RHODE ISLAND
UNIVERSITY OF SOUTHERN MISSISSIPPI | WOODS HOLE OCEANOGRAPHIC INSTITUTION

oeci

Dive into the **Bridge to Ocean Exploration (B2OE) Program** with the Ocean Exploration Cooperative Institute (OECI) at the **University of Rhode Island's (URI) Graduate School of Oceanography (GSO)**! Dip your toes into the multidisciplinary world that is ocean science, with opportunities in website development, video/data engineering, media production, and/or science communication.

The OECI (https://web.uri.edu/oeci/) is a unique consortium of top oceanographic institutions: URI, Woods Hole Oceanographic Institution (WHOI), University of New Hampshire (UNH), the University of Southern Mississippi, and the non-profit, Ocean Exploration Trust. They work together to push the boundaries of ocean exploration with research and innovation in remotely-operated and autonomous vehicle operations, virtual engineering connectivity, and ocean science communication and engagement.

A core mission of the OECI is to inspire future generations of ocean scientists and engineers, and support the Blue Economy. The B2OE Program, based out of URI/GSO's Ocean exploration science center, is an experiential program key to advancing this mission. Currently, the OECI is recruiting **up to five students** to participate in this **PAID**, **part-time, experiential learning program,** with the following project pathways:

Computer science and machine learning
Ocean exploration data science
Interactive digital web design
Media production and 3D animations
Science communication and social media

Project Pathway Breakdown- Ocean Exploration Data Science:
- Ocean exploration data includes large volume data sets produced that are used to map the seafloor, identify ocean organisms, understand the distribution of biology in the water column, and find locations of seafloor fluid flow. Possible tasks include development/implementation of an online data tracking system, development of pre-cruise data management plans, and creation of metadata requirements, all of which will help ensure that OECI data is accessible to the science community and public.
- One aspect of ocean exploration is to identify and characterize the natural resources on the seafloor. Critical minerals are a key element of this as they contain rare metals that are needed for a future green energy and technologically advanced economy. Critical minerals are mostly understood through the collection of physical samples from the seafloor. Another data science project could focus on examining these geological samples in the laboratory in order to develop baseline measurements and to help researchers find and utilize the broadscale geological catalogue that OECI is developing.

- *Useful coursework/experience requested for this project pathway:*
    - Seeking students who have completed at least 1 year at CCRI
    - Suggested courses:
        - Computer literacy, including familiarity with programming languages (e.g Python), markup languages (HTML, XML), operating systems (e.g. Linux) and data structures/algorithms
        - Introduction to Software Engineering, Programming Concepts, Database Design & Management, Technical Math
        - Science coursework

- *Benefits to BOE Program participation:*
    - PAID, part-time opportunity; up to $17/hour salary.
    - Exposure to cutting-edge ocean science, engineering, and media production technologies and best practices at the ISC and within the OECI.
    - Collaboration with OECI personnel; field trips to tour URI, WHOI, and UNH facilities.
    - Opportunity to remotely participate in expeditions abot NOAA *Okeanos* and (EV) *Nautilus.*
    - Peer-to-peer interaction with other ocean science and exploration interns with NOAA Ocean Exploration and other OECI partners, including Tuskegee University.
    - Information exchange and networking opportunities with industry professionals during a "Blue Economy Career Fair", March 2023.

In addition to the above mentioned part-time experience, additional program requirements and expectations include:
- Paid work experience up to 16h/week (November 2022- May 2023)
- Potential for onsite and/or tele-work.
- Weekly tag-ups with mentors to gauge project progress and answer questions (mentors are also available via email for questions, etc. at any time)
- Participation in OECI student events.
- Participation in pre- and post-experience 360˚ evaluation.

Eligibility:
- Currently enrolled CCRI students (undergraduate/associate's degree, and/or workforce certificate candidates)
- Degree, major, or intent to major in a field relevant to the OECI's mission; these can include, but are not limited to: STEM (science, technology, engineering and math), computer science, media production and graphic design, communications, education, and/or business operations/administration.
    - *Preferred (but not required) for this pathway: Computer Studies Students (all concentrations)*

Application Requirements:
- **Interested students must complete the [OECI BOE online application](#) on or before October 12, 2022.**
    - In addition to this application, interested individuals will also be required to submit their current resume
    - Submit 3 professional references listed (who can speak to the applicant's character and professional and/or academic background- this can be a professor, advisor, teacher, community member, work supervisor, mentor, etc.).

Applications will be reviewed and analyzed based on merit and relevant experience. Potential participants will be notified by **October 21, 2022**, for an in-person or virtual interview. Final selections will be made on or before **November 4, 2022**, and candidates will be notified of their program status. **The anticipated program start date, with an on-site orientation at URI's Graduate School of Oceanography campus in Narragansett, RI, will be November 15, 2022.**

Questions? Please contact Holly Morin (holly_morin@uri.edu).