





Department of Educational Support Services Arts in Education

BROOKHAVEN NATIONAL LABORATORY

Brookhaven National Laboratory provides exciting opportunities to drive excitement for students and educators in science, technology, engineering and mathematics (STEM) by exploring Brookhaven Lab's research initiatives.



IMPORTANT INFORMATION

- AGREEMENT TO TERMS is required to be signed by an authorized District representative to process any Contract requests submitted to AIE
- Contract Requests are required be entered 6-8 weeks before date program
- A signed invoice must be submitted with all Contract Requests to process

 THERE WILL BE NO EXCEPTIONS



<u>Assembling Amino Acids:</u> Explore amino acids and proteins, discover how scientists use powerful tools like the National Synchrotron Light Source II to study them, and build their own amino acid models while learning how this research drives advances in medicine, drug design, and catalysis.



<u>Build a Better Battery Through Chemistry:</u> Students will learn about the science behind building better batteries with an introduction to atoms, molecules, and chemical reactions. Then, they'll design and perform an experiment that tests the properties of metals and electrolytes for their potential as conductors in a wet cell battery.

DNA Analysis: Students step into the role of molecular biologists as they use recombinant DNA tools to analyze and compare genetic material. By studying restriction patterns of Lambda DNA, they'll identify an unknown enzyme and see firsthand how scientists decode genetic information with accuracy and precision.

<u>Graphing Solar Energy with Python:</u> Step into the role of data scientists, using Python to visualize solar irradiance data and explore how sunlight impacts solar panel performance in real-world research.



Properties of Nano: Students dive into nanoscience at BNL, exploring materials a billionth of a meter in size and conducting experiments to see how nanoscale properties impact the world around us.

Details including contact information & pricing can be found along with similar programs in the Eastern Suffolk BOCES Arts-In Education online catalogue: artsined.esboces.org

Eastern Suffolk BOCES does not discriminate against any employee, student, applicant for employment, or candidate for enrollment on the basis of sex, gender, race, color, religion or creed, age, weight, national origin, marital status, disability, sexual orientation, military or veteran status, domestic violence victim status, genetic predisposition or carrier status, or any other classification protected by Federal, State, or local law. ESBOCES also provides equal access to the Boy Scouts and other designated youth groups. Inquiries regarding the implementation of the above laws should be directed to either of the ESBOCES Civil Rights Compliance Officers at ComplianceOfficers@esboces.org: the Assistant Superintendent for Human Resources, 631-687-3029, or the Associate Superintendent for Educational Services, 631-687-3056, 201 Sunrise Highway, Patchogue, NY 11772. Inquiries may also be addressed to the Office for Civil Rights at the US Department of Education, 32 Old Slip, 26th Floor, New York, NY 10005, 646-428-3800, OCR.NewYork@ed.gov